Six Key Cybersecurity Engineering Activities for Building a Cybersecurity Strategy

February 3, 2021 — A new blog post by the SEI’s Carol Woody and Rita Creel describes how cybersecurity engineering can help build an organization’s cybersecurity strategy. Today’s integrated, complex technology operates in a dynamic, contested environment in which operational security controls are no longer sufficient to protect missions.

Woody and Creel, of the SEI’s CERT Division, write in the post, “Cybersecurity engineering applies the rigor of engineering with the knowledge of operational security into all aspects of the lifecycle to build, configure, operate, and maintain systems for secure and resilient operation.” They discuss how six important areas of cybersecurity engineering enhance a cybersecurity strategy:

- determining risk
- defining and monitoring system and component interactions

Read the blog post *Six Key Cybersecurity Engineering Activities for Building a Cybersecurity Strategy*.

Watch the webcast *What Is Cybersecurity Engineering and Why Do I Need It?*

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The OCTAVE FORTE (OCTAVE For the Enterprise) model for enterprise risk management helps executives and other decision makers understand and prioritize the complex risks affecting their organizations.

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Carol Woody and Rita Creel describe the cybersecurity engineering areas that help ensure mission success.

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Emily Sarneso and Art Manion discuss the rollout of VINCE, how to use it, and future work in vulnerability coordination.

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Phil Groce discusses the security implications of remote work.

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This paper explores how the current paradigm of vulnerability management might adapt to include machine learning systems.

Security Engineering Risk Analysis (SERA) Threat Archetypes
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Webcast - Busting the Myths of Programmer Productivity
Bill Nichols asks if the great programmers really are 10 times faster than the rest and what that productivity difference means.

Webcast - What Is Cybersecurity Engineering and Why Do I Need It?
Carol Woody and Rita Creel discuss how cybersecurity engineering knowledge, methods, and tools throughout the lifecycle of software-intensive systems will reduce their inherent cyber risk and increase their operational cyber resilience.

Upcoming Events

SolarWinds Hack: Fallout, Recovery, and Prevention, February 10
Art Manion and Matthew Butkovic will explore the lifecycle of the
SolarWinds activity and discuss both technical and risk assessments to prepare organizations to defend against this type of incident.

**AADL/ACVIP User Days 2021**, February 3-4
This free, two-day virtual forum presents the latest on the Architecture Analysis and Design Language (AADL), the Architecture-Centric Virtual Integration Process (ACVIP), and associated tools.

**Note:** The SEI is evaluating all upcoming courses, conferences, and events case-by-case in light of COVID-19 developments. Check individual event pages for the latest information.

[See more events »](#)

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**Upcoming Training**

**Cybersecurity Oversight for the Business Executive**
February 23-24, 2021 (SEI, Live Online)

**Software Architecture Design and Analysis**
March 9-12, 2021 (SEI, Live Online)

**Insider Threat Program Manager: Implementation and Operation**
March 23-25, 2021 (SEI, Live Online)

**Note:** The SEI is evaluating all upcoming courses, conferences, and events case-by-case in light of COVID-19 developments. Check individual training pages for the latest information. You may also contact us at [courseregistration@sei.cmu.edu](mailto:courseregistration@sei.cmu.edu) or +1-412-268-7388.

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