2022
Annual **INCOSE**
international workshop
HYBRID EVENT
Torrance, CA, USA
Jan 29 - Feb 1, 2022

Systems Security Engineering

www.incose.org/IW2022

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CHAIR

Rick Dove (dove@parshift.com)

CO-CHAIRS

Beth Wilson (wilsondrbeth@aol.com)
Keith Willett (Keith.Willett@incose.org)

MEMBERS

About 15 active and 139 in the WG community

INCOSE CONNECT ADDRESS

https://connect.incose.org/WorkingGroups/SystemsSecurityEngineering/Pages/Home.aspx

INCOSE WEB PAGE

www.incose.org/incose-member-resources/working-groups/analytic/systems-security-engineering

Charter Summary

WG PURPOSE/MISSION

This working group (WG) believes that system engineering cannot succeed without accepting core responsibility for enabling and facilitating effective system security - partly in system requirements, partly in system trade space recognition, but mainly in system thinking applied to concepts of operations and systems architecture. Sustaining system functionality in the face of intelligent determined attack requires self preservation capabilities that adapt and evolve with intelligence, proactive innovation, and strength of community equal to the adversary as a minimum. This requires full system awareness and adaptability, and system-of-system relationships. Security engineering alone cannot accomplish this.

WG GOAL(S)

- Goal: Establish and foster the responsibility for security within Systems Engineering, with effective system security accepted and practiced as a fundamental part of system engineering.
- Goal: Establish and foster self-sustaining cross- community involvement between systems engineers, security engineers, and system security standards.
- Goal: Establish and foster systems engineering guidance for enabling effective systems security in the face of evolving system security needs.
- Goal: Attract an international cadre of engaged participants to broaden the understandings and effectively deal with multi national interests and differences.
- Customer(s)/Stakeholder(s): Systems engineering educators, systems engineering process and standards developers, defense systems engineering acquisition procedure developers, systems engineering leaders and managers, customers of systems that require effective security, systems engineers, and security engineers.

Charter Summary

WG SCOPE

This WG will address and foster system engineering design concepts, processes, enabling-support (such as standards and certifications), and community understanding and acceptance of the roles that systems engineering must play in enabling effective systems security in the face of evolving systems complexity and systems security threat.

OUTCOMES (PRODUCTS/SERVICES)

- Outcome: Fundamental responsibility accepted within systems engineering for effective security practices established by SE processes and standards.
- Outcome: Identification and development of eleven foundation concepts for Security in the Future of Systems Engineering (FuSE).
- Product Category: Systems engineering guidance on needs, roles, and methods that enable effective system security in an evolving threat environment.
- Product Category: Effective security process integration with system engineering processes.
- Product Category: System security standards compatible with systems engineering standards, with both encouraged to keep effective pace with evolving system security and systems engineering realities.

IW Outcomes

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IW Outcomes

Two Meetings...
Monday - all day review of 10 articles on FuSE Security for June issue of INSIGHT
Tuesday - 2-hour general meeting to review wg operational status and propose new projects

PLANNED ACTIVITIES AFTER IW

Investigate and advance the understandings of FuSE Security Roadmap concepts.
Develop/refine Handbook v5 system security engineering material.

PLANNED WORK PRODUCTS AFTER IW

Papers and presentations that advance and socialize the FuSE Security Roadmap concepts
Handbook v5 system security engineering section