

Cyber Simulator Showcase

CERT Cybersecurity Workforce Development

Part 1 of 6: INTRODUCTION

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03 JUN 2019

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This material is based upon work funded and supported by the Department of Defense under Contract No. FA8702-15-D-0002 with Carnegie Mellon University for the operation of the Software Engineering Institute, a federally funded research and development center.

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DM19-0578

Agenda

0930 Welcome and Introduction

0945 Demos of Training and Simulation Tools

- TopGen and GreyBox
- GHOSTS
- vTunnel/WELLE-D
- TopoMojo

1200 Lunch and keynote by Dr. Tom Longstaff, CTO of the SEI

1300 Demos of SCADA-Sim and FinSim

1400 Hands-on Labs to gain experience using Tools

1530 End



Welcome and Logistics

Purpose:

- Build awareness of CMU/SEI's open-source software developed to enhance cybersecurity training and simulations
- Encourage interaction and dialogue on emerging cybersecurity training and simulation requirements and best practices

Logistics:

- Restrooms
- Lunch
- WiFi SSID: livewirelessguest surfnow!
- Laptops



Who We Are



CMU Software Engineering Institute (SEI)

- Founded in 1984 by DoD as the only R&D software engineering FFRDC
- Focus on software engineering, cybersecurity and artificial intelligence research
- ~730 total employees
- Headquarters in Pittsburgh, PA; Other offices near strategic partners in CA, MA, MD and VA

CMU Campus – Global Research University

- Global research university known for its world-class, interdisciplinary programs in computer science, machine learning/artificial intelligence, engineering, business, arts, policy, and science
- Ranked #1 for Computer Science; #1 for AI; #4 for College of Engineering
- 1,442 total Faculty and 130 Research Centers

CERT and its Cyber Workforce Development (CWD) Directorate

SEI's CERT Division

Birthplace of Cybersecurity

Founded by DARPA in 1988 in response to the Morris worm

CWD's Mission

Provide force-multiplying solutions to rapidly grow and strengthen the nation's cybersecurity workforce--addressing the problems of **time**, **scale**, and **cost**

- We empower the workforce to “**Train as You Fight**”
- We develop and transition cutting-edge **Prototypes**
 - Training and Exercise Platforms
 - Modeling and Simulation Tools
 - Gamified and On-demand training





Questions ?