

CASE STUDY**The Naval Postgraduate School Boosts Allied Governments**

Cyber Readiness through SimSpace's High Fidelity IT/OT Simulations

NPS EAG faculty and staff were preparing for a special engagement with allied foreign militaries to provide sophisticated training to their personnel including operational technology (OT) simulation. While EAG developed their own instructional material and basic cyber range capabilities, it was a daunting task to create an environment suitable for a flexible and challenging multi-dimensional IT/OT network simulation for multiple teams.

The goal was to recreate an actual attack on a critical infrastructure facility. EAG realized that use of a commercial solution could meet this challenge and provide an enriched experience for the engagement, despite their tight deadline.

CHALLENGES:

Developing a flexible, multi-dimensional IT/OT network simulation to accurately replicate a critical infrastructure attack was a daunting task.

Limited time and in-house capabilities made it essential to find a commercial solution to meet the training objectives effectively.

The Challenge

- ▶ The Naval Postgraduate School's Quest for Advanced IT/OT Simulation

“Many participants remained in the range after the two-day event concluded. They had not been exposed to such a robust environment before and wanted to take full advantage of the opportunity.”

- ▶ DNaval Postgraduate School Representative

Benefits

- ▶ Leverage off-the shelf capabilities
- ▶ Rapidly customize a virtual OT/IT network designed to their needs
- ▶ Recreate a real-world critical infrastructure attack in a simulated environment
- ▶ Provide practical red, blue, and purple team experiences Improve the overall cybersecurity posture of our nation's allies

A Flexible and Multi-Dimensional Training Solution

NPS selected the SimSpace Platform, which includes a high-fidelity cyber range providing intelligent, host-based user emulation and network traffic to simulate production environments of any scale. The SimSpace Platform provides network design tools enabling the user to quickly build upon existing components and create complex virtual environments. Customers can develop and refine their unique Tactics, Techniques, and Procedures (TTPs) in a practical setting.

NPS collaborated with the SimSpace Solutions Engineering and Range Operations teams to customize a SimSpace template network design – representing a power plant with the associated Programmable Logic Controllers (PLCs), Human Machine Interfaces (HMIs), workstations, and networking elements – to meet modeling and simulation goals for their event.

For more information about the SimSpace Platform,
please visit: simspace.com.

