



Converging Cybersecurity Solutions for Energy Systems to Practice

Invisible Bit-Level Critical Traffic Protection

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May 31, 2023, 7:00 - 8:00 pm, Israeli time

(12:00-1:00 pm EST, 9:00 am-10:00 am AZ / Phoenix Time)

Link: <https://asu.zoom.us/j/6712258140>

Abstract: The most significant threat to cyber security in critical infrastructures often originates from trusted insiders. These individuals, whether intentionally or inadvertently, may reveal encryption keys to potential attackers, granting full access to internal networks and valuable data assets. Traditional safeguards have employed unidirectional gateways, or data diodes, to establish a secure separation between critical infrastructure and the management and control facilities. However, this approach only prevents remote access, potentially leaving the door open to local intrusion by insiders. In contrast to these established practices, we propose a fundamentally different approach. We introduce a human-independent, invisible, and protocol-agnostic network appliance, specifically designed for secure bidirectional communication, thereby enhancing the safety and integrity of the infrastructure.

Bio:



Dr. Larisa Tsirinsky, an expert in Technical Cybernetics and Computer Science, is the founder, CEO, and CTO of E.S. Embedded Solutions 3000. (<https://embedded-solutions.co.il/>) She holds several patents in time/mission-critical processes and network security, demonstrating her innovation and acumen. Dr. Tsirinsky also contributes to the ISO Global Directory, shaping global Industrial and IT security standards. Her prior experience includes serving as a System Engineer and Project Leader at MALAM, Israel Aerospace Industries, further enriching her expertise before establishing E.S. Embedded Solutions 3000.

