

Operational Blindspots: Why Securing Critical Infrastructure Starts with Improved Visibility

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ABSTRACT

Industrial control systems (ICS) are both the backbone and the achilles heel of every nation's critical infrastructure. They provide us essential services that support the foundation of modern society. If hijacked by a piece of malware, or compromised by an insider, such systems could cause business disruption and physical damage on a literally catastrophic scale.

This session will review the reasons why operational networks pose a very different set of security challenges compared to traditional IT networks. We will explain how lack of visibility into operational networks and changes made to programmable logic controllers (PLC), the brains that control industrial processes, represents the biggest impediment to protecting critical infrastructure from adversaries, malicious insiders, or human error.

We will explore the steps that should be taken to improve ICS visibility and control, and examine the types of innovations that can help secure these critical environments. If time permits, we will review a case study about a wastewater treatment plant that had to deal with these issues.

ABOUT THE AUTHORS

Mille Gandelsman is the CTO and Co-Founder of Indegy, an industrial cyber-security startup that provides real-time situational awareness and security for industrial control networks. He leads Indegy's technology research and product management activities. Prior to Indegy, Gandelsman led engineering efforts for Stratoscale and spent several years leading cyber-security research for Israel's elite intelligence corps. Gandelsman is an IDF Talpiot graduate and holds a master's degree with honors in computer science from Tel Aviv University. Contact: Mille@indegy.com