SEL

Project Highlight

Cyber Services Life Cycle Collaboration Protects Campus Utilities Operations

For energy infrastructure expansion projects, the security and resilience of operational technology (OT) networks are critical. For OT systems, software-defined networking (SDN) offers unmatched security, situational awareness, reliability, and performance. SEL Cyber Services brings deep expertise in secure network design, life cycle services, and third-party integration, making the group an effective collaborator along the pathway to cyber maturity.

Challenge

As part of a broader microgrid deployment, the University of Notre Dame Utilities Department realized it would need a network solution to provide network visibility, centralized access management, and robust threat monitoring. Their existing infrastructure lacked full documentation and integration across systems, creating blind spots and security risks. Notre Dame sought a partner who could not only design and optimize their new microgrid network but also provide ongoing cybersecurity support.

Solution

SEL Cyber Services began with a front-end engineering design study, uncovering undocumented areas of the network and providing a comprehensive topology map. From there, Cyber Services designed and implemented a secure OT SDN architecture, leveraging the existing third-party systems Notre Dame already had without disrupting operations. After working with Cyber Services directly, Notre Dame opted to add additional life cycle services support for continuous monitoring, system health checks, incident response support, and security awareness training. Cyber Services also deployed Nozomi Networks intrusion detection system technology across three buildings, aggregating traffic into a central sensor for proactive threat detection.

Results

With OT SDN, Notre Dame now benefits from a resilient, scalable cybersecurity framework. The ongoing life cycle services from SEL ensure the university is equipped to detect and respond to threats, maintain network health, and integrate future upgrades seamlessly. This collaboration has fostered a culture of continuous improvement and cyber maturity, with Notre Dame adopting the Blueframe® Device Management and Automation (DMA) software solution and expanding the role of Cyber Services across campus operations.

About SEL

SEL is a 100 percent employee-owned company that specializes in creating digital products and systems that protect, control, and automate power systems around the world. This technology mitigates blackouts and improves power system reliability and safety at a reduced cost. Headquartered in Pullman, Washington, SEL has manufactured products in the United States since 1984 and serves customers worldwide.

Cybersecurity philosophy

We build layers of defense and maintain the integrity of each layer's purpose—in other words, we apply the right technology at the right layer. We believe simpler products are easier to defend and that the safety of the power system and availability of the protection and control devices come first.

Reliability

SEL products are designed and manufactured for the world's most challenging environments, exceeding all industry standards for temperature, shock, and electric stress.

Our products have a mean time between returns for repair (MTBR) of more than 250 years, based on observed field performance. This means that if you have 250 SEL products installed in your systems, you can expect to have less than one unscheduled removal from service per year for any reason, whether it's a defect or an external factor such as overvoltage, overcurrent, wildlife damage, or environmental exposure.

Warranty

SEL backs our products and commitments with a ten-year warranty, no-cost diagnostic and repair services, local support, and a variety of test procedures and certifications.

Support

SEL support teams are stationed in regional offices around the globe and staffed with application engineers who are experts in our products and in power system applications. We offer 24/7 technical support at no cost for the life of your SEL products.

Contact us

To learn more about partnering with SEL Cyber Services, contact secure@selinc.com or visit selinc.com/cybersecurity.

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