# CYBERSECURITY FOR MIDSTREAM OIL AND GAS COMPANIES

## OUR SOLUTIONS

Cybersecurity is vital to the safety and security of our nation's critical infrastructure. Increasing reports of unauthorized access into the Information Technology (IT) and Operational Technology (OT) systems of midstream oil and gas companies have prompted regulatory bodies to enact new requirements onto the owners and operators of oil, natural gas, liquified natural gas, and other hazardous liquid pipelines or facilities.

Ransomware attacks have become big business for cyber criminals, and for industrial control systems (ICS) there is the possibility of much greater consequences when a breach occurs. Malicious attacks on an ICS can lead to loss of production, damage to physical assets, environmental damage, unsafe conditions for operators, and putting public health and safety in jeopardy. Now is the time to seriously evaluate vulnerabilities and fortify cybersecurity practices.

### COMMON CYBERSECURITY CHALLENGES FOR MIDSTREAM OIL AND GAS COMPANIES:

- Volume of legacy control systems in need of modernization
- Constant stream of known vulnerabilities to specific ICS components
- Lack of IDMZ (Industrial De-Militarized Zone) between Enterprise IT & OT networks
- Significant financial impact from process downtime
- Difficulty in operating process control systems if network connectivity to the outside is lost
- Logistical challenges in securing and monitoring access to remote sites
- Inherent vulnerability in using third-party, wireless telecommunication networks for remote sites
- Proliferation of ransomware attacks on enterprise IT networks that put OT networks at risk

## WHY EN AUTOMATION IS THE TRUSTED NAME IN MIDSTREAM SYSTEMS INTEGRATION:

- Automation engineers with extensive experience in midstream pipeline and facilities operations
- Field veterans who understand the consequences of interrupting live control systems
- Subject matter experts in OT network design and implementation
- Experience applying best practices for ICS cybersecurity and following regulatory compliance
- Established, long-term industry partnerships
- Expertise across a wide variety of hardware and software platforms
- Nationwide base of professional integrators
- Effective facilitators with experience coordinating at all levels of a client organization

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**An added advantage of collaborating with EN Automation** is the facilitation between engineering and IT to develop OT-specific risk controls such as incident response plans, specifying supply-chain requirements for product and service vendors, change management, network standards, and policy for user access control. EN also offers ongoing support for regulatory compliance, internal and external audit preparation, on-call field support, staff augmentation, workshop facilitation, and more services including:

- Evaluation of current practices and resource utilization
- Delivery of roadmap to adopt best practices and improve ICS cybersecurity posture
- Creation or validation of OT system inventory and comprehensive control system documentation
- Risk awareness communication at all levels of the organization through scenario-based tabletop exercises

- Detailed risk assessment including threat and vulnerability analyses, and collecting relevant threat intelligence
- OT network architecture design/re-design for proper segmentation, remote access, firewall rules, virtualization, and the use of secure public and private cloud services
- Cyber and safety focused process hazard analysis (PHA) facilitation for new/upgraded systems
- Prioritized recommendations, planning, and implementation of OT asset hardening and remediation
- Implementation of OT network monitoring and continuous threat detection systems
- OT cybersecurity awareness and response training

**EN Automation is an established systems integrator with extensive midstream experience, and the right partner for your cybersecurity maturity journey. Contact us today to set up a cybersecurity consultation.**

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