

CASE STUDY

OT Asset Discovery and Security Assessment for an American Energy Solutions Provider



Client

The client is a leading global advanced energy solution provider based in the USA. There was a need to perform a holistic operational technology (OT) security assessment that could improve the visibility into the enterprise's operational technology assets. The manufacturer's assets in six plants based in four countries across three continents.

Challenges

- Lack of full asset inventory knowledge to expose attack surfaces
- Lack of insights into risk and critical vulnerabilities of Operational Technology (OT) assets to cyberattacks

LTIMindtree Solution

LTIMindtree performed a detailed OT assessment and helped the client perform asset inventory and gap assessment. We also helped them improve continuous threat detection (CTD) and secure remote access (SRA) Design.

Key Solution Highlights:

- Asset discovery and comprehensive asset inventory with profiling of each asset in process networks, machine networks, and MES networks.
- AS-IS diagrams- network connection tracing based on process/data flow per system and documenting AS-IS network architecture
- Gap assessment for the overall plant based on IEC 62443 control requirements
- Proposed network and security architecture for the plant in line with Purdue reference architecture
- Studied the feasibility of devices/systems for OT network monitoring solution deployment
- Design documents (HLD/LLD) for OT network monitoring solution and secure remote access

Business Benefits

Improved process machine
network connection visibility

Completed OT
asset inventory

Optimized working design for
OT network monitoring and
secure remote access

Insights into vulnerabilities at a
granular level (up to L0 and L1)
as per the PURDUE model

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