

# SIMULATED OT PENETRATION TESTING PLATFORM BRIEF

**A new way to run OT security: continuous, consequence-free, and powered by your data. Frenos turns your existing OT data into a consequence-free digital twin where an AI adversary runs continuous, zero-impact penetration testing, revealing real attack paths instantly and reshaping how OT risk mitigation gets done.**

Born from practitioners who've defended critical systems, Frenos replaces slow, manual, high-risk assessment cycles with an always-on environment built for scale, speed, and accuracy. Instead of tiptoeing around production or waiting for perfect visibility, teams can finally see what matters, reason through real adversary behavior, and act with confidence — all without touching live systems.

## ABOUT THE PLATFORM

The Frenos Platform is built for OT security teams who need comprehensive insight without operational risk. It runs fully offline via secure laptop deployment for air-gapped environments or on-premises installation to ensure your data never leaves your control.

Frenos accepts manual uploads of the data you already have: asset inventories, vulnerability exports, router and firewall configurations, and more. From there, the platform builds a consequence-free digital twin that mirrors your real environment.

## WHY FRENOS?



### CONTINUOUS, ZERO-IMPACT PENETRATION TESTS

- **Digital Network Twin**  
Transforms your uploaded datasets into a fully isolated replica of your OT environment, where attack paths can be safely explored at scale without scanning, downtime, or production risk.
- **Flexible Deployment**  
Run Frenos on secured laptops for field assessments or deploy centrally on-prem. Perfect for consultants and internal teams needing repeatable, high-fidelity analysis anywhere.



### AI-POWERED ADVERSARIAL SIMULATIONS

- **SAIRA: Simulated AI powered Adversarial Reasoning Agent**  
SAIRA thinks like an attacker, simulating millions of potential TTPs inside the digital twin and exposing how real adversaries would move, chain vulnerabilities, and escalate impact.
- **Threat Intelligence Simulation**  
Turn intelligence into action by testing real-world TTPs inside your own architecture, generating prioritized, environment-specific insights instead of generic noise.



### PROACTIVE, FORWARD-LOOKING DEFENSE

- **Contextual Insights**  
Instead of overwhelming teams with endless findings, Frenos delivers ranked, contextual mitigation steps tailored to your environment's architecture, pathways, and constraints.
- **Proactive Defense**  
Shift from reactive detection to proactive, strengthening resilience before adversaries act, even with limited staff.

## HOW IT WORKS

Upload visibility, endpoint, vulnerability, and segmentation data to build digital twin AI agent conducts attack path analysis to identify most probable paths and TTPs into OT. Received prioritized mitigations and track progress.

