

# Cyber Security Requirements in OT & IoT Environments

Criteria		Benefits
<b>Asset inventory and visibility of the entire OT infrastructure</b>		
Detection of all assets (IT-, IoT- and OT-based devices) in the OT network without affecting operation		→ Technology and process consolidation
Comprehensive support of IT, IoT and OT protocols		→ Joint monitoring
Interactive automatically created asset inventory with assets, communication relations and protocols		→ Elimination of departmental silos → Increase responsibility and minimise costs
Identification of new devices (device type, firmware version, etc.)		→ Merging IT and OT → Optimised asset management
Monitoring of all remote control accesses		<b>Nozomi users recognise the customer benefit within minutes of minutes after implementation.</b> The rapid asset detection and network visualisation increase the awareness of security operations teams.
Optional: active query options without effects on the operation, for Windows, Unix hosts or network devices		
<b>Protection of IoT/OT configurations</b>		
Identification of changes to Programmable Logic Controllers (PLC) or Human Machine Interfaces - PLC programme Code, firmware, configuration changes		→ Complete log of ICS activities
Monitoring and analysis for IoT and OT Process variables		
<b>Vulnerability analysis and risk management</b>		
Identification of specific IT, IoT and OT vulnerabilities		→ Enhanced insights for risk management without having to build up additional resources → Workflow for the <b>rapid detection of anomalies</b> for the existing Security Operations Team
Detection of anomalies and manipulation in network traffic		→ The integrated Cyber Threat Detection combines behavioural anomaly detection, signature-based threat detection and asset intelligence for comprehensive risk monitoring
<b>Advanced Cyber Threat Detection - threat detection incl. alerting</b>		
Use of the continuously updated safety databases		→ Rapid detection of cyber-attacks and proactive mitigation
Proactive vulnerability and risk detection and identification of MITRE Attack vectors		→ Increases robustness against cyber attacks → Active block function in combination with a firewall system
Real-time alerts on suspicious activities and threats in OT networks (e.g., malware detection)		→ <b>Instant protection against ransomware</b>

Audit and compliance	
Non-modifiable audit logs	→ Compliance with national and operational requirements for cyber security
Fully comprehensive time machine (snapshot-function) incl. version comparison check	
Support for the implementation of international standards such as EC 62443, CIS Critical Security Controls, ISO 2700 series incl. 27001, MITRE ICS Attack Framework	
Monitoring via surveillance of zones and conduits according to IEC 62443	
Supporting the implementation of the NIS(2) Regulation	
Integration into the enterprise architecture and support of security operations teams	
Instant integration with leading security partners, Active Directory, SIEM, Syslog, REST API, Data Exports	→ Actionable alerts, dashboards and reports that accelerate security response and significantly improve OT and IoT risk management
Customisable analyses and reports	→ <b>Seamless integration with SOC/IT tools</b> and workflows, including automated <b>response to block attacks</b> when integrated with compatible firewalls and endpoint security products
Scalable solution models for on-premises requirements	→ <b>Global scalability</b> to protect thousands of locations
Scalable solution models for SaaS requirements	→ Deployment flexibility with physical, virtual container and portable on-premises appliances, as well as SaaS-powered and cloud deployments

Your advantages with **Nozomi Networks MSSP and Platinum Partner IKARUS Security Software:**

Our interdisciplinary team of experts with IT, OT and IoT security expertise enables easy commissioning and results within minutes. We provide knowledge transfer and customised support to help you build your IT/IoT/OT security operations team.



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