

RISSA Rhebo Industry 4.0 Stability and Security Audit for Industrial Networks

Industrial Ethernet and IP are increasingly being used within critical infrastructure and automated manufacturing plants to gain the benefits of increased system connectedness. Connecting industrial controls with SCADA, MES, and ERP systems leads to huge productivity gains and plant flexibility. With this connectedness new risks

in regards to production stability and cyber security emerge. Additionally, the complexity of the Ethernet-based networks increases the possibility of misconfigurations, quality issus due to real-time demands, and capacity bottlenecks.

Complete Stability and Security Audit

RISSA – Rhebo Industry 4.0 Stability and Security Audit provides a fast and thorough stability and security analysis of your industrial control networks using the Rhebo Industrial Protector. The identification of all network device nodes and users, along with their communication patterns provides complete digital transparency for production plants and critical infrastructures.

Workshop resulting in scorecard and prioritized actions

The audit concludes with a workshop where all findings are discussed and evaluated using the RISSA scorecard system. Documented prioritized actions in each scorecard area help with the resolution of stability and cybersecurity issues and allow for a measured implementation of remediation, quality improvements, and continuous improvement plans.



WORKSHOP AND REPORT

- Details of the infrastructure including a list of all network subscribers and communications;
- Summary of anomalies found during the audit period;
- Detailed insights into network quality specific to the requirements of an ICS and/or manufacturing process network (including real-time behavior, utilization, stability);
- Recommendations for continuous improvement measures of stability and cybersecurity issues;
- Prioritized scorecard of recommended actions for closing security gaps and correcting misconfigurations:





AUDIT BENEFITS

- Digital transparency through complete asset identification including communication pattern and content of industrial protocol communications;
- Significant and measurable increase in plant availability.
- Substantial increase in industrial cybersecurity readiness.
- Increased insight and awareness of industrial network operation and security;
- Easy extension of monitoring capabilities for continuous stability improvement and security programs;
- 2-week period complete monitoring time with little/no client effort.

RISSA - Procedure and scope

| 2 WEEKS | RHEBO INDUSTRIAL PROTECTOR DEPLOYMENT | Typically less than one hour per sensor (network tap point) location. |
|---------|---------------------------------------|---|
| | IMMEDIATE TRANSPARENCY | First notifications and analysis data available in real-time seconds after installation and ready for initial discussion immediately following deployment. |
| | MONITORING | Rhebo Industrial Protector permanently monitors the entire control communication and learns the existing communication patterns. The device reports all suspicious events by means of complete anomaly notification. Optional: Client can designate an immediate escalation path for high risk notifications found during the audit period. |
| | DATA ANALYSIS | The analysis of the audit data can be performed at the client premises or at a secure Rhebo location. Depending on the size of the installation, the audit analysis period takes about a day. All data leaving the client premises are completely controlled, contained, and subsequently destroyed at completion of the audit. |
| | WORKSHOP | Joint client-Rhebo workshop includes the presentation of the audit results along with prioritized actions along with remediation recommendations and Q&A. |
| | REPORT AND SCORECARD | Detailed report with all results and recommendations for action, prioritized according to risk assessments during audit, and a scorecard of results per audit area. |
| | CONTINUOUS IMPROVEMENT | Measures to continuously improve plant stability and cybersecurity. |



WHAT TO EXPECT

- Tightly aligned with the needs and knowledge of the customer Detailed discussion of the results in the joint workshop with the following report.
- Many years of combined industry experience in monitoring and anomaly detection in industrial control and IT networks and progressive IIoT applications deploying globally today.
- Passive and nonreactive network monitoring: There is zero risk of damage or disruption for the existing infrastructure. Plant operation continues uninterrupted.
- Rhebo Industrial Protector is specifically designed for use in industrial control networks and identifies and decodes all current industrial control protocols.
- Rhebo Industrial Protector is completely developed in Germany and carries the »IT Security made in Germany« TeleTrust e.V. seal



About Rhebo

Rhebo is a technology company that specializes in the reliability of industrial control system by monitoring the control communication. We take the Industrial Internet of Things into account and protect networked industrial control systems and critical infrastructu-

res. Our aim is the complete validation of control networks against failures, network anomalies and cyberattacks by complete analysis of all the data streams on the content level.