



CylusOne: Multi-Level Cyber Protection for Railway Operational Systems

The rapid advancement of Rail Operational Systems (ROS), hyperconnectivity, and automated systems (e.g. CBTC, ERTMS, PTC), has ushered in a new era for rail cybersecurity.

As a result, security and rail engineering teams now face an extremely complex and heterogeneous milieu, resulting in an ever-expanding attack surface.

In the last two years, these dynamics have become even more palpable (amid COVID-19), leading to the adoption of new enterprise security solutions and strategies. However, even with this new approach, security teams are still struggling to manage the entirety of their rapidly expanding rail attack surface.

Your Challenges

- The rail-specific attack surface is expanding, due to rapid digital transformation
- The rail cyber threat landscape is evolving, and harder to forecast
- Rail environments are hard to protect due to safety constraints
- Rail technologies are usually proprietary and not supported by off-the-shelf cybersecurity solutions
- A siloed approach to cybersecurity, makes it difficult to prioritize and remediate vulnerabilities

CYLUSone™

CylusOne is the first-to-market, leading cybersecurity solution that offers continuous monitoring and real-time protection for the global railway industry.

Cylus' solution provides 360-degree protection for all rail systems, regardless of size and geography, enabling real-time threat detection, advanced forensics and mitigation, simplified security operations and more.

The solution offers mainline, urban and freight rail operators a complete real-time cybersecurity view that covers all levels – from the network's entire topology down to the granular level of each and every asset of a railway system.

Asset Visibility

Real-time discovery and monitoring of all assets across the rail ecosystem, including ATP (Automatic Train Protection), Interlocking, Field elements, Operations Control Centers, Braking systems and more.

Threat Detection

Unmatched threat detection powered by Deep Packet Inspection (DPI) of rail systems include ERTMS, I-ETMS and CBTC systems, modeling of threats to rail environments and a continuous feed of threat intelligence.

Security Operations and Remediation

A multi-functional platform that bridges the gap between cybersecurity and rail operations, offers remediation playbooks, and integrates seamlessly with Operations Control Center (OCC) and Security Operations Center (SOC) systems.

Virtual Segmentation

Automated virtual segmentation into security zones and conduits for continuous compliance with all rail cybersecurity standards and regulations (e.g. IEC-62443, TS-50701, and more).

What Makes Us Different?



Technology

Cylus' solution suite and unparalleled IP portfolio drives extremely high accuracy with minimal false alarms, and solves some of the most vexing cybersecurity threats that railway companies are facing today.



Non-Intrusive

CylusOne takes just less than an hour to install, with zero downtime or impact on safety, and provides full visibility and protection instantly.



Expertise

CylusOne is used by leading railway companies around the world, with tailored implementations and a proven track record of immediate ROI.

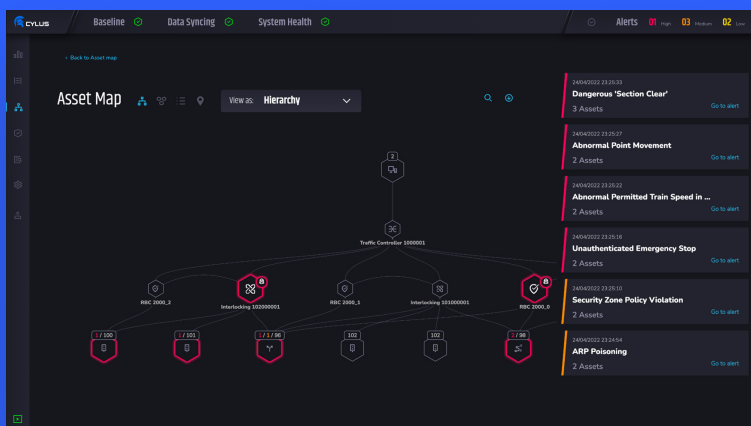


Experience

Cylus is spearheaded by a strong bench of experts in OT cybersecurity, traffic management, signaling and rolling stock systems. Also, backed by leading engineering, product and researchers specializing in rail cybersecurity.

Key Benefits

- 360-degree protection of your rail operational environment
- Reduce false positive using threat detection tailored to your environment
- Enforce security policies and gain maximum control over software updates and cybersecurity-related operations
- Prioritize your security issues based on impact analysis tailored to your rail environment
- 100% Asset Discovery - Unmatched asset discovery and management in operational environments around the world
- 80% Cost Savings - Reducing manual processes, redundant tools, engineering overhead, and direct damages due to cyber-attacks



About Cylus

Cylus is the global leader in rail cybersecurity, providing advanced solutions to protect mainline urban and freight rail companies from a wide array of threats and risks. Leading rail companies and operators use CylusOne to prevent safety incidents and service disruptions caused by cybersecurity events, without requiring any modifications to the network. With an unparalleled IP portfolio, Cylus has established itself as the pioneer and global leader in rail cybersecurity.

The company was founded by seasoned experts in cybersecurity, machine learning, traffic management, signaling and onboard train systems, and is currently protecting some of the largest rail systems around the world.

Working closely with prominent industry groups:



For more information, please visit our website, cylus.com, or contact us at info@cylus.com