

Intrusion Detection supported by powerful edge-processing, designed specifically for rail on-board and wayside applications.

As part of a proactive approach to cyber security, RazorSecure Delta's proven security monitoring forms a crucial part of the cyber risk management process for rail operators. With extensive deployments on production systems and flexible implementation options, Delta enables operators to detect potential cyber-threats early and respond to them quickly.

Delta is an Intrusion Detection System designed specifically for rail deployments (in particular rolling stock) that allows for full visibility of the network topology, and identifies unusual and unexpected system and network behaviours that could be indicative of a potential threat. Supported by powerful edge processing, Delta is able to be deployed as both a host and network monitoring solution whilst minimising data overhead to the wayside, Delta's flexible monitoring options enable you to detect a wide range of relevant threats. A range of hardware and software options permit deployment in a wide range of rail vehicles and networks/systems. Security events and data can be analysed through the integration of RazorSecure's Security Dashboard, a platform built specifically for use in railroad monitoring and for integration with Security Information & Event Management (SIEM) systems. The Delta solution meets the demands of various cybersecurity frameworks such as IEC62443, TS50701 and others. In 2024, over 3200 rail cars in operational service globally will be monitored by Delta.



BENEFITS

➤ FLEET WIDE SECURITY MONITORING

Delta provides a clear and consistent monitoring solution across your entire estate, helping to triage and respond to potential cyber threats.

➤ MITIGATE RISKS ON VULNERABLE OR OBSOLETE SYSTEMS

Discover vulnerable obsolete or unpatched systems within your OT environment and monitor these closely, reducing the risk of compromise.

➤ MINIMISES THE IMPACT OF AN INCIDENT

With the early detection of incidents, response times are improved, resources can be targeted and impact minimised, allowing for effective recovery that is supported by accurate forensic information.

➤ SAVE MONEY ON IDS IMPLEMENTATION

Delta's flexibility by design allows for both virtual or software-only deployment across new and legacy assets, reducing hardware footprint and integration costs. Our hardware based solutions are compact and low maintenance.

➤ COMPREHENSIVE REPORTING

Delta's user interface offers transparent reporting supported by a range of options, allowing you to present risks clearly and enabling you to make informed business and operational decisions.

KEY CAPABILITIES

HOST INTRUSION DETECTION

Delta's host IDS uses anomaly based detection to learn the baseline behaviour of your asset, alerting on any changes to the host - including but not limited to - changes to critical files, unusual processes and unusual login attempts. By using anomaly-based threat detection, RazorSecure's Delta shortens detection time and mitigates the risk of cyber attacks.

MULTIPLE DEPLOYMENT OPTIONS

Delta is able to be deployed as either a hardware or software option on legacy and new build fleets, providing an effective estate wide monitoring solution, proven in rolling stock installations.

NETWORK THREAT DETECTION

Delta's asset and network discovery capabilities allow for the discovery of new or unexpected network routes and traffic, and identifies rogue assets connecting to your ethernet network.

LOW FALSE POSITIVE ALERTS

Delta's machine learning technology distinguishes between malicious and non-threatening activity to reduce the risk of 'alert fatigue', a common distraction from real threats.

CRITICAL DECISION MAKING AT THE EDGE

Delta avoids bandwidth limitations and latency challenges by processing data in real-time on the train itself, rather than transmitting it across long routes to central data centres.

FLEET WIDE SECURITY MONITORING

Delta automates the rich and comprehensive collection of asset data to drive cyber security monitoring, learning behavioural anomalies to proactively detect and remediate security issues.

ON-BOARD & WAYSIDE MONITORING

Delta is able to effectively monitor both on-board and wayside systems, providing an integrated view of rail assets regardless of their physical location.

LOW MAINTENANCE

Delta has been developed specifically for new and legacy rolling stock and remains effective for the life of the asset, even in limited connectivity environments.

REPORTING

RazorSecure can provide standard monthly or weekly reporting on your cyber threats, with the option of custom reporting on specific threats or threat actors.

INTEGRATION WITH EXISTING SIEM

Data from the RazorSecure platform can be integrated with an existing SOC and into leading SIEMs via Common Event Format (CEF) feeds and REST APIs.

UNINTERRUPTED SERVICE

Delta continuously processes data in real-time on the train itself, detecting behavioural anomalies 24/7, allowing for immediate mitigation of cyber threats.

RAZORSECURE APPROACH

We recognise that each train fleet is different and requires a holistic approach due to differences in system and network architecture. By understanding your cyber risks, we can advise on security best practices and appropriate risk mitigations. We will then work with you to design, integrate, homologate and deploy the RazorSecure solutions as appropriate. Our flexible approach is customised to manage the unique challenges and requirements of each customer. We will work closely with you to find a solution for any challenge you may have. The first step towards improved cyber security is simply to begin a conversation with us, and our team will be happy to guide you through the process.

