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3:10 PM – 3:30 PM

Bridging the Data Divide: Advancing Mission Readiness and Cyber Resilience in Maritime Operations through Strategic Data Management

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Abstract:

In the maritime domain, the exponential growth of operational, intelligence, and cyber data presents unique challenges to existing infrastructure, budgets, and data management strategies. As fleets and shore-based facilities deploy a growing array of sensors, platforms, and security systems, maritime operations must deliver actionable, data-driven insights in increasingly resource-constrained environments. These insights are essential for enhancing threat detection, improving situational awareness, ensuring compliance, and maintaining fleet readiness and mission effectiveness. Meeting these demands requires innovative solutions to eliminate data silos and inefficiencies inherent in traditional workflows.

This session will focus on how strategic data management can securely route information from diverse sources, optimize log volume to control costs, enrich intelligence feeds, and extend data retention capabilities. By adopting modern, adaptable solutions, maritime stakeholders can achieve a comprehensive, real-time understanding of their environment, empowering commanders, analysts, and cybersecurity teams to make informed decisions critical to mission success in maritime operations.

Key Takeaways:

- **Eliminate Data Silos:** Achieve true interoperability by routing data from any maritime sensor, platform, or system to the necessary destination and format, enabling faster decision-making and integrated threat analysis across the fleet and command centers.
- **Optimize Log Volume and Costs:** Streamline data collection to improve shipboard and shore-based system performance, reduce software license costs, and prioritize resources for high-priority operational needs.

- **Enrich Data for Maritime Security:** Integrate external threat intelligence and operational context to create a fuller, more actionable picture of the maritime domain, strengthening cybersecurity and operational decision-making.
- **Ensure Compliance and Storage Efficiency:** Implement long-term data retention strategies that meet maritime regulatory standards and mission requirements while staying within budget constraints, ensuring operational continuity and evidence-based planning.

In today's contested maritime environments, the ability to harness data effectively is essential for mission success. Modern, strategic data management empowers maritime operations to enhance readiness, resilience, and operational superiority.