

Wednesday, February 14, 2024

4:00 PM - 4:20 PM

Accelerated Data Access Impact on Naval Operations

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Abstract:

Information access and awareness drive timely and appropriate decision making for every mission and are critical for minimizing time-to-action.

The Defense Department strives to share data across Services, Organizations, Departments, and even Coalition Partners under the Combined Joint All Domain Command and Control (CJADC2). Yet, moving and accessing data is problematic, particularly as sensor data volume grows at a rate for which communications networks cannot keep pace. This challenge is further compounded as distance (latency) increases and traditional network performance dramatically decreases.

This has been a significant issue for the Navy, where the primary means of communications for ships at sea is via MIL-SAT communications at very low bandwidths. While there are now more options to access COMSAT networks in Low Earth Orbit (LEO) that provide multiple times the bandwidth of the legacy satellites, those networks cannot be fully utilized due to the impact of latency with standard protocols like TCP/IP or UDP.

Vcinity will present a solution that mitigates the negative effect of latency on data access and transfer over moderate to high latency networks from shore-to-ship or ship-to-ship. In addition, Vcinity will discuss how data at a remote location can be accessed by users or applications over any IP-based network in near real-time without having to transfer the data first. These capabilities are enabled by Vcinity's unique approach to achieve data throughput at ~95 percent of the available bandwidth, regardless of distance.

This session will dive into how to improve your security posture by eliminating unnecessary data movement, reduce cybersecurity risks associated with copy management, and better protect data in flight by both encrypting, as well as splitting it, over several paths and reassembling at the remote site. Vcinity has partnered with Dell Technologies to create solutions that operate in standard rack mount servers for the datacenter and edge solutions that can be deployed to mission end points including shipboard use. Ready to arm your command with the necessary tools and intel for mission success? We hope to see you in this session to learn how Dell and Vcinity can give you real-time, secure connectivity and control of your data—regardless of where and when your mission takes you.