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Leveraging Army Investments in VMWare Technologies to Meet Target Level Zero Trust and the Path to Advanced ZT

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VMware's suite of products, including NSX, Threat Prevention, and Multi-Cloud services, all with a zero-trust focus, offer a comprehensive solution to address the defined problems.

Bandwidth Limitations: VMware NSX optimizes network performance and bandwidth utilization with its software-defined networking (SDN) capabilities. Through smart routing, prioritization, and network virtualization, NSX ensures the efficient use and management of available bandwidth, thereby reducing the limitations at the tactical edge.

Hybrid Cloud Solutions: VMware's multi-cloud services leverage the power of VMware Cloud Foundation to simplify the deployment and operation of a hybrid cloud. This facilitates seamless and secure data exchange between cloud environments (Army, Commercial, or Private) and the tactical edge, offering benefits like scalability, resilience, and efficient resource utilization.

Converged Data Transport: VMware NSX provides a secure, efficient, and cost-effective solution for the transport of converged data. By leveraging a software-defined approach, NSX enables secure machine-to-machine data exchanges integral to C5ISR/EW systems. The zero-trust model ensures only authenticated and authorized entities can access and communicate within the network, contributing to security.

Tactical Edge: VMware's solutions are built to deliver high performance even on small form factor devices at the tactical edge. Integrating AI/ML capabilities, they can execute cognitive weaponeering

tasks for EW using ES operational information, enhancing the operational effectiveness and decision-making process.

Dynamic Spectrum: VMware NSX allows for dynamic management and allocation of network resources, including spectrum access. Through the use of SDN, it can support real-time adjustments to network configurations, ensuring robust EMS-dependent capabilities even in contested and congested environments.

Risk and Opportunity Correlation: VMware's Threat Prevention platform utilizes AI/ML algorithms to correlate data and inform of emerging risks and opportunities. This capability aids commanders in making timely and data-driven decisions to ensure the success of ongoing missions.

Cyberspace Social Layer: Leveraging zero-trust principles, VMware's suite can create a cyberspace social layer that effectively identifies and correlates actors, units, activities, and affiliations. These insights can then be incorporated into the Common Operating Picture (COP) and Military Decision-Making Process (MDMP) products, promoting situational awareness and informed decision-making.