

What Next-Gen Data Storage Looks Like for the DoD



In the digital age, data reigns supreme, and for the Department of Defense (DoD), it is an indispensable asset to gain and maintain an information advantage. The key to unlocking the potential of data lies in modernized solutions that streamline data operations. This in turn will provide the warfighting capability to gather, make sense, and act at all levels and phases of war to deliver an information advantage at the speed of relevance.

The Data Imperative

Data is the lifeblood of the Federal Government, especially for the DoD. The ability to gather, make sense of, and act upon information is crucial at every level and phase of warfare. To deliver an information advantage at the speed of relevance, defense agencies must embrace modernized data solutions that streamline data operations.

However, as we explore strategies involving hybrid and multicloud approaches, the distributed nature of the DoD's data becomes increasingly complex to manage. Modern cloud-related growing pains can be effectively addressed with the right tools, but defense agencies face significant modernization challenges.

Legacy Limitations

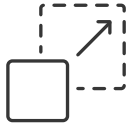
One of the primary challenges is that legacy infrastructure has struggled to keep pace with the rapid developments in data analysis capabilities. Many of these legacy systems may lack the capacity to perform at the advanced levels required by modern warfare scenarios. To meet these evolving demands, next-generation data and storage solutions must provide a unified data platform tailored to both enterprise and tactical environments.

This unified platform should facilitate secure data sharing and management across air, sea, space, and ashore operations. To fully leverage data for warfare superiority, the DoD requires next-generation storage solutions capable of handling the volume and complexity of the DoD's data. These solutions must exhibit scalability, resilience, and security at their core.

The Pillars of Modern Data Solutions

Leveraging data effectively necessitates establishing a data management structure that supports the best solutions for each use case, rather than retrofitting solutions around applications and their limitations.

Agencies should seek these critical characteristics in modernized tools:



SCALABILITY

Consider not only current needs but also anticipate what will work several years down the road. Traditional storage appliances can become cost prohibitive as they reach their limits. Dell PowerStore is a prime example of a high-availability, all-flash, and all-NVMe solution that packs a powerful performance into a compact footprint. Its scalability, especially in tactical and mobile environments, is a game-changer.

For even larger-scale needs, Dell PowerFlex, a software-defined solution, consolidates storage and computes on a single platform. It offers unified block and file storage, designed with cloud integration in mind. The ability to scale up to hundreds of nodes configured for storage, compute, or hyperconverged purposes provides the flexibility needed for evolving mission requirements.



RESILIENCE AND SECURITY

Infrastructure expansion is only meaningful if it can withstand adversity. Data must be backed up and available swiftly in case of disaster. Security and resilience are intertwined, safeguarding data and enabling swift recovery. Managing sprawl, both on premises and in the cloud, is crucial. While some sprawl may be inevitable with hybrid and multicloud approaches, the consolidation of multiple environments into a single platform minimizes complexity and vulnerability.

Data Protection and Readiness

In terms of security, Dell Technologies' solutions adhere to the CIA triad: confidentiality, integrity, and availability. Data-at-rest encryption, protection against bit rot, and high-availability options ensure data remains secure and accessible.



**STORAGE
AGILITY**



**BREAKTHROUGH
EFFICIENCY**



**CONTINUOUSLY
MODERN**

PREPARING FOR TRANSFORMATIVE DATA INSIGHTS

As the technology landscape continues to evolve, so do our adversaries. To stay ahead and ensure readiness, defense agencies need scalability, resilience, and security at the core of their technology acquisitions. A modern data management infrastructure prioritizes data mobility.

As defense technology leaders strive to optimize performance, multipurpose solutions become invaluable. Dell Technologies' PowerStore and PowerFlex offer the necessary data storage capabilities for cloud, on-premises, and edge environments, combined with computing capabilities. This ensures data mobility and uniform access to services, regardless of where a workload resides.

In the ever-changing landscape of defense technology, it's important that solutions empower defense agencies to adapt and overcome. Whether on a warship, in the desert, or in a data center, our goal is to provide consistent access to data that is secure, agile, and ready for action.

Let's Talk

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