

SOLUTION BRIEF

Enabling Data-driven Outcomes Across Military Organizations

Modern data management powers the mission of the U.S. Department of Defense.

The Department of Defense (DOD) is leading the way when it comes to harnessing the power of data for mission success and continues to spearhead technologies such as artificial intelligence (AI), machine learning (ML), and deep learning (DL). Still, there is more to do to operationalize these technologies. The DOD requires a modern, scalable, secure, and future-proof IT foundation—one that delivers a seamless data ecosystem and removes bottlenecks to enable it to make mission-critical decisions and breakthroughs.

Delivering Mission Success

Pure Storage® works with every branch of the DOD—Army, Navy, Marine Corps, and Air Force, as well as combatant commands, the intelligence community, and supporting system integrators. Pure understands the distinctive needs of each. We deliver data management solutions that are effortless to use, efficient from end-to-end, and [Evergreen®](#) to upgrade. The speed and efficiency of all-flash technology enables military organizations to spend less time managing data, freeing up time to advance the mission.

The Power of Data

The DOD embraces computing solutions that enable warfighters in their environment rather than forcing them to conform to siloed data and legacy applications. High-performance computing (HPC) is also fueling innovation across the military. Often, power and speed constrain computation, and technologies like AI, ML, and DL can drive success. However, to fully leverage these technologies, organizations need a standard, purpose-built platform to run critical workloads at scale while significantly reducing compute times. Pure Storage accelerates modern analytics and AI workloads, by delivering a single, scale-out storage platform that drives time to insight and fuels mission success.



Innovation Leadership

- Evergreen® Service Models
- Install once and upgrade non-disruptively
- Container storage management with Portworx®



Cloud Ready

- Mobilize data to the cloud with Pure Cloud Block Store™
- Transform your cost center—CAPEX or OPEX models
- Create an agile, cloud-native environment



Customer Experience

- Manage your data proactively with Pure1®
- Experience seamless installation
- Experience on-prem IT that works like the cloud

Powering Digital Transformation in DevSecOps

The DOD is digitally transforming its technology and operations through the DevSecOps process. To accelerate these efforts, it needs a fully integrated solution. [Portworx® by Pure Storage](#) offers persistent storage, data protection, disaster recovery, data security, cross-cloud data migrations, and automated capacity management for applications running on Kubernetes. With Portworx, the DOD can run cloud-native data services in any cloud, using any Kubernetes platform, with built-in high-availability and hybrid-cloud mobility.

Empowering the Warfighter with Speed and Agility

For the DOD, data—and the ability to process it quickly—are differentiators that ensure mission success. A hybrid-cloud infrastructure is a fundamental component that empowers the warfighter with data critical to maintaining technological advantage. Military organizations need flexible, agile solutions with the speed required for their mission.

[Evergreen//One™](#) provides a unified subscription, consumption-based model, and predictable per-unit cost for data services—on-prem and in the cloud—granting financial and operational flexibility via policy-based management and self-service options. Evergreen//One gives the DOD power to rethink how it spends, paying only for what is needed and never over-provisioning. Since Evergreen//One includes Pure Storage [FlashArray™](#) and [FlashBlade®](#) platforms, you can use OPEX¹ budgets to consume block, file, and object storage services deployed anywhere, including in the cloud.

The DOD values data density to conserve rack space and power to meet size, weight, and power (SWaP) requirements. Pure Storage products that use QLC flash deliver NVMe performance, hyper-consolidation, and the simplified management their data deserves.

Partnering on Converged Infrastructure

Pure Storage and its partners provide end-to-end solutions for HPC and AI. FlashStack® from Pure Storage and Cisco delivers cloud-like agility and pay-as-you-use pricing across hybrid-cloud environments. With [AIRI//S™](#), Pure Storage and NVIDIA's AI-ready infrastructure, data can be productive without worrying about infrastructure bottlenecks. AIRI//S is designed from software to hardware to keep NVIDIA's DGX GPUs busy for AI workloads at any scale.

Securing and Protecting Your Data

With Pure Storage, the DOD can be confident that its data is stored securely and with high availability without sacrificing efficiency. All-flash arrays from Pure Storage have achieved certification by the National Information Assurance Partnership (NIAP)—the U.S. component of the 25-nation Common Criteria consortium—providing the highest security standards.

A crucial part of securing your data is the built-in cybersecurity measures found within your storage infrastructure. Pure Storage all-flash arrays come with several built-in features designed to keep your data secure, including:

- End-to-end data protection (both in-flight and at rest)
- Built-in ransomware mitigation with [SafeMode™ Snapshots](#)
- Petabyte-scale recovery with [Rapid Restore](#)

Pure Storage [Purity](#) incorporates software and hardware measures to meet the highest security standards, ensuring the safety of data. Meeting the ultra-high FIPS 140-2 security standard, Purity provides validated always-on encryption.

Most departments still suffer multiple [data protection](#) pain points that fall into four broad categories:

- **Complexity:** Legacy environments can become a mess of too many appliances and fragile management silos.
- **Speed:** Backups take too long. Restores can take even longer. Nobody has time for that.
- **Cloud integration:** Legacy data protection lacks easy automation or integration with cloud services.
- **Cost:** Extra licensing for data protection features, forklift upgrades, and storage re-buys are expensive. This shouldn't be acceptable.

Legacy storage arrays and backup appliances can't meet the demands of the DOD. Pure Storage leads the way with modern data management solutions. Vendors may try bolting on new features to outdated product architectures, but they only make incremental improvements that fall short of your goals. At Pure, we've redesigned the storage array from the ground up with a sharp eye on data protection. And it shows. The unified [Pure1®](#) interface enables you to manage all Pure products, and with Pure1, data encryption is always on.

The most important part of backup is recovery. Pure Storage [SafeMode](#) Snapshots, a built-in feature of FlashBlade and FlashArray, make recovery nearly instant, no matter the volume size. SafeMode snapshots protect backup data and backup metadata by creating a secure, immutable copy—it can't be eradicated, modified, or encrypted, even with admin credentials. And there's no need to change your backup software. Simply set it and forget it. Pure Storage also enables application business continuity with both [ActiveCluster™](#) replication and [ActiveDR™](#) continuous replication that provide zero and near-zero RPO across virtually any distance.

Pure Storage Is A Leader

For the ninth consecutive year², Pure Storage has been named A Leader in the 2022 Gartner® Magic Quadrant™ for [Primary Storage](#), positioned highest for Ability to Execute and furthest for Completeness of Vision. Pure Storage has also been named A Leader for the second consecutive year in the 2022 Gartner® Magic Quadrant™ for [Distributed File Systems and Object Storage](#).

The DOD requires data solutions that are fast, simple, scalable, secure, and that can seamlessly manage the petabytes of data that power mission-critical workloads. Pure Storage enables the DOD to optimize data without the complexity of managing the infrastructure behind it.

Additional Resources

Learn how you can accelerate storage performance while decreasing total costs and complexity:

- See how Pure Storage helps the DOD [simplify data storage and services](#).
- Find out more about simple, reliable, and flexible [storage as a service](#) from Pure.
- Explore Portworx, the industry's [leading Kubernetes data services platform](#).
- Speed time to benefit and accelerate modern data management with help from [Pure Professional Services](#).

¹ OPEX treatment is subject to customer's auditor review.

² This includes five years as a Leader in the Magic Quadrant for Solid-State Arrays and now four years as a Leader in the Magic Quadrant for Primary Storage.

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