

## SOLUTION BRIEF

# Enable Data-driven Outcomes for the U.S. Department of the Navy

Modern data management powers the mission.

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). Yet, there is more to do to operationalize these technologies. The U.S. Navy requires a modern, scalable, secure, and future-proof IT foundation—one that delivers a seamless data ecosystem, removes bottlenecks, and enables them to make mission-critical decisions and breakthroughs.

## Delivering Mission Success

Pure Storage® works across the DOD—including the Navy, Marine Corps, Army, and Air Force branches; combatant commands; and supporting system integrators—and understands each branch's distinctive needs. 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 their missions.

## The Power of Data

The Navy embraces computing solutions that enable warfighters within 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. Technologies like AI, ML, and DL can drive success, but power and speed often constrain computation. 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 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 Navy is digitally transforming its technology and operations through the DevSecOps process. To accelerate these efforts, they need 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 Navy 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 Navy, 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](#) empowers the Navy to rethink how it spends, pay only for what is needed, and never over-provision. Since Evergreen//One includes [FlashArray™](#) and [FlashBlade®](#) platforms, OPEX<sup>1</sup> budgets can be used to consume block, file, and object storage services deployed anywhere, including in the cloud.

The Navy 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 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 Pure and NVIDIA's [AI Ready Infrastructure](#) (AIRI//S™), 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, the Navy 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 data is the built-in cybersecurity measures found within storage infrastructure. Pure all-flash arrays come with several built-in features designed to keep data secure, including:

- End-to-end data protection (in-flight and at rest)
- Built-in ransomware protection with [SafeMode™ snapshots](#)
- Petabyte-scale recovery up to 270 TB per hour with [Rapid Restore](#).

[Purity Secure](#) 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 Secure 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 and restores are time consuming.

- **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.

Legacy storage arrays and backup appliances simply can't meet the demands of the Navy. 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. 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](#)<sup>®</sup> interface enables the management of all Pure products, and with Pure1, data encryption is always on.

The most important part of backup is recovery. Pure [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 metadata by creating a secure, immutable copy, which can't be eradicated, modified, or encrypted, even with admin credentials. And there's no need to change backup software—simply set it and forget it. Pure also enables application business continuity with both [ActiveCluster](#)<sup>™</sup> replication and [ActiveDR](#)<sup>™</sup> continuous replication that provide zero and near-zero RPO across virtually any distance.

Pure provides everything the Navy needs for a truly modern data protection experience. Whether you target a few critical problem areas to start or dive into the full experience, Pure can help make your data more secure.

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

## Pure Storage Is A Leader

For the ninth consecutive year<sup>ii</sup>, Pure Storage has been named A Leader in the 2022 Gartner<sup>®</sup> Magic Quadrant<sup>™</sup> for [Primary Storage Arrays](#), 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<sup>®</sup> Magic Quadrant<sup>™</sup> for [Distributed File Systems and Object Storage](#).

## Additional Resources

- Find out more about simple, reliable, and flexible [storage as a service](#) from Pure.
- Explore [Portworx](#), the industry's leading Kubernetes data services platform.
- See how Pure delivers effective, efficient, and mission-ready data management solutions for [data-driven governments](#).
- Speed time to benefit and accelerate modern data management with help from [Pure Professional Services](#).

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<sup>i</sup> OPEX treatment is subject to customer's auditor review.

<sup>ii</sup> 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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