

SOLUTION BRIEF

# Efficient, Simple Data Solutions for Federal Agencies

Combine agility, reliability, and simplicity in a single unified system with the Pure Storage® platform.

Data powers government operations and the delivery of citizen services in an increasingly digital world. When federal agencies can leverage their massive volumes of data, they can provide better insight, make more timely and relevant decisions, craft better policies, and offer better citizen services. Gleaning insights from your data can be challenging, however, with a changing IT infrastructure landscape driven by advancements in AI, rising cloud costs, cyber threats, and consumption-based models. To successfully navigate these challenges, agencies need a dedicated partner to help them evolve their infrastructure and maximize the power of their data. Pure Storage is that partner.

The traditional storage lifecycle has many manual processes that add up to cost, complexity, and time delays that inhibit agencies from maximizing the potential of their data. As a result, agencies must spend time focusing on the ins and outs of data storage, rather than on their core mission. Many agencies face limitations that hinder their digital transformation with storage that is:

- Overly complex: Legacy storage solutions that cause issues with availability, risk, and resources management—too many systems anchoring agencies to the past with all effort going into keeping systems running
- **Too rigid**: Data infrastructure that's at odds with as-a-service consumption models, lacking agility and flexibility
- **Unreliable**: Compromised data availability that causes performance issues and downtime, leading to significant cost and risk to agency operations

These factors are disruptive to agencies and cost them money. They also require additional resources to manage all the complexity. At scale, the situation becomes inefficient, fraught with risk of error, and expensive. Not only do agencies have to manage a complex and rigid system, but this can hinder the most important part of their operations—innovating for citizens. There is a better, easier way of buying and using storage.



#### Simple Unified Infrastructure

Unify all your data storage on one platform that's simple to deploy, run, and manage.



# End Downtime for Good

Minimize agency risks with a premier data storage platform that ensures zero planned downtime.



## Savings that Fuel Agency Data Strategy

Massively reduce costs by minimizing your footprint, lowering energy use, and optimizing operational efficiency, so you can focus on strategic initiatives.

## Transform Agency Data Management with the Pure Storage Platform

When federal agencies can get more value from their data, it becomes a strategic asset and powers innovation. With the Pure Storage platform, they gain a simple, reliable, agile, and efficient solution—delivered as a service—that unifies all data storage with a single operating system. It continuously improves over time without the need for disruptive, costly upgrades. Further, agencies can count on their data being available and minimize risks with a premier data storage platform that ensures zero planned downtime.

The Pure Storage platform grows with your agency, forever. Agencies can be confident that their systems will continually evolve with future-proof savings by eliminating outdated processes and inefficiencies that drain agency budgets and block future-focused investments. They can innovate and leverage the power of AI, dramatically reduce cloud costs, and ensure their data is safe and secure with a <u>tiered resiliency architecture</u> that keeps operations running and meets the most stringent industry security requirements.

#### Al at Scale, Made Simple and Fast

Al and analytics are the driving force behind many of the fastest expanding agency use cases. AIRI is a certified NVIDIA DGX BasePOD reference architecture, representing the next evolution of the innovative and efficient AI Ready Infrastructure (AIRI) from Pure Storage and NVIDIA. AIRI combines Pure Storage FlashBlade//S™ with the NVIDIA DGX platform to provide the underlying infrastructure and software to accelerate deployment and execution of agency AI workloads. This includes support for NVIDIA Magnum IO GPU-Direct Storage, which provides the high-performance IO directly to the GPUs powering the AI infrastructure.

FlashBlade//S is the ideal data storage platform for AI, as it was purpose-built from the ground up for modern, unstructured workloads and accelerates AI processes with the most efficient storage platform at every step of your data pipeline. A centralized data platform in a deep learning architecture increases the productivity of data scientists and makes scaling and operations simpler and more agile for the data architect. FlashBlade//S is also a certified ethernet storage solution for NVIDIA DGX SuperPOD. Together, they provide powerful accelerated compute, a high-performance and efficient storage platform, and AI software and tools to address the most demanding AI and HPC workloads.

#### The All-flash Unstructured Data Repository

Economical at scale, FlashBlade//E™ offers a better way to manage agency data growth efficiently and simply, delivering a best-in-class user experience. With predictable performance, energy efficiency, and simplicity at its core, FlashBlade//E is the ideal unified solution for unstructured data repository workloads across data protection, technical computing, AI, and many other use cases.

FlashBlade//E offers greater density, is future proof, and has a smaller footprint with up to 2.5 TB per W Effective Capacity.

Greater Storage Density	Future Proof	Smaller Footprint
<ul><li>8-15X better density</li><li>105% more usable TB per RU</li></ul>	<ul> <li>Designed to avoid obsolescence</li> <li>Can be upgraded modularly</li> <li>At least 3x less e-waste than competitors</li> </ul>	<ul> <li>Energy savings—up to 85% less energy</li> <li>As little as 1/10th the rack space</li> </ul>

#### High-performance, Low-latency Data Access for Unified Block and File Storage

Agencies are dealing with more data than ever before. They need high performance and highly available storage, paired with intelligent management, to succeed at this new level of scale. Agencies can achieve the responsiveness, capacity, and speed they need with Pure Storage FlashArray—built for optimal security, efficiency, and reliability.



FlashArray//XL\*: The answer for your most demanding workloads. Designed for performance at scale, it delivers latency as low as 150µs and throughput as high as 36GB/sec. This is performance fit for massive database workloads such as <a href="Maintenance">SAP/SAP HANA</a> or Oracle, or tens of thousands of virtual machines (VMs). Industry-leading dedupe and compression algorithms, combined with exceptional density, enable massive space, power, and cooling savings.

**FlashArray//X**: The all-NVMe architecture of FlashArray//X provides <u>low-latency storage</u>. Accelerate everything from Tier 1 databases to large-scale virtualized and cloud-native apps, with a non-disruptive upgrade path.

FlashArray//C<sup>™</sup>: For less performance-sensitive workloads, the all-QLC <u>FlashArray//C</u> delivers cost economics that eliminate the need for hard disk drives and hybrid arrays and offers the perfect balance of cost and performance. Experience more speed and lower latencies plus significant power savings compared to disk-based systems.

## **Cyber Resilience: Securing and Protecting Agency Data**

The federal government is focused like never before on protecting the integrity and availability of its data stores. It's a tall order, given the complexity of modern data centers, along with application and device proliferation. Agencies need a cyber resilience strategy that delivers more than just an insurance policy against potential threats. They also need lightning-fast data restore capabilities. The Pure Storage platform enhances risk mitigation, ensures safe and secure data, and enables always-on data protection. In addition, Evergreen//One™ delivers an enterprise-grade storage-as-a-service subscription, a unique service to mitigate risk with a cyber recovery SLA.

With Pure Storage, agencies can be confident that their 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 Storage all-flash arrays come with several built-in features designed to keep data secure, including:

- End-to-end data protection
- Built-in ransomware protection with SafeMode™ snapshots
- Petabyte-scale recovery up to three-times faster than competitive offerings, with Rapid Restore

Pure Storage <u>Purity</u> 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.

#### Simple Design, Deployment, and Use

Modernizing your infrastructure shouldn't stop at storage. A modern data architecture also needs smart storage management. Pure Storage helps you extract maximum value from your data while reducing complexity and expense.

**Pure 1°:** Storage management from Pure1 delivers critical information about the health and functionality of your entire stack, right down to each VM. The Pure1 platform provides cloud-based management and effortless predictive support with full-stack analytics and the Al-driven power of Pure1 Meta®.

Pure Cloud Block Store<sup>™</sup>: Run your applications seamlessly across your on-premises, hybrid-cloud, and cloud environments with consistent enterprise data services, resiliency, and APIs. Pure Cloud Block Store is a public-cloud instance of FlashArray<sup>™</sup>, available in AWS and Microsoft Azure, that uses the same software stack and is operationally identical to your data center FlashArray. This enables cloud use cases such as easy workload migration, disaster recovery, and DevTest with elastic cloud resources.



#### **Continuous Innovation and Optimization**

The federal technology landscape is constantly evolving. A modern storage solution should meet the needs of today and tomorrow, and with Pure Storage, agencies benefit from a data storage solution that gets better over time.

The Pure Storage Evergreen® subscription portfolio simplifies your storage management lifecycle and lowers TCO by more than 50% compared to traditional forklift upgrades. It eliminates expensive refreshes and offers seamless rapid upgrades and expansion, without disruption. Get modern storage with the freedom to upgrade, expand, and continuously innovate. All software features are included with no additional license fees.

#### **Financial Flexibility**

With shifting priorities and evolving project needs, predicting storage consumption year to year can be challenging. The result is either over-buying and wasting budgets, or under-buying and facing storage resource constraints that delay projects. Pure Storage simplifies data storage with its consumption-based STaaS, Pure Storage <a href="Evergreen//One">Evergreen//One</a>, eliminating complexity and reducing costs. It delivers:

- **Cloud economics**: Pay only for what you use—on-premises, in a colocation facility, or in the public cloud. Pure Storage pays for your electricity and rack space for a true cloud experience.
- Operational agility: Modern on-premises storage with guaranteed SLAs for performance, capacity, availability, and energy efficiency.
- **Continuous innovation**: A cloud-like, non-disruptive architecture that scales seamlessly while ensuring consistent service quality.

#### Performance, Simplicity, and Efficiency for Federal Agencies

Pure Storage is the federal government's partner in transforming data into powerful outcomes whether deploying traditional workloads, modern applications, containers, or more. In today's rapidly evolving IT landscape, characterized by the advances of artificial intelligence, growing cyber threats, rising cloud costs, and consumption-based models, the Pure Storage platform delivers a transformative solution. By seamlessly integrating agility, reliability, efficiency, and simplicity, Pure Storage revolutionizes how you store, protect, and manage all your data.

#### **Additional Resources**

- Learn more about solutions for federal agencies.
- Discover the Pure Storage platform.
- Find out more about <u>high-performance Al</u> for federal agencies.
- Explore cyber resiliency solutions that guarantee uninterrupted agency operations.
- Read about how Pure Storage sets organizations free from private and public cloud data silos.

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