PANASAS*

Modern HPC Storage for Government Agencies

Government organizations have some of the most demanding workloads in the history of high-performance computing (HPC). The artificial intelligence, machine learning (AI/ML) and HPC applications they use to solve national challenges run on mountains of data stored in multiple locations, formats, and systems.

Storing, protecting, and managing all this mission-critical data can seem daunting - but it doesn't have to be.

Panasas ActiveStor® solutions running the PanFS® parallel file system are designed to drive data-intensive HPC and AI/ML workflows. Here's how we help federal agencies thrive with a modern HPC storage platform that delivers optimized performance, easy data management, and unmatched reliability.

> Accelerate all your workloads with an intelligent, high-speed data engine.



Other parallel file systems

- lack the reliability needed to ensure optimal data integrity and availability,
- require a team of costly HPC storage specialists to oversee and maintain,
- and are narrowly tuned to reach peak performance for only one specific workload type.

everything from CFD simulations of aircraft designs to Al-enabled molecular modeling. These applications demand scalable, low-latency, and high-throughput performance from their storage environment, and traditional storage simply can't keep up. To boost areas: reliability, manageability, and workload

Challenge



Solution

three challenges, sparing you from the Using the proprietary software feature Dynamic Data Acceleration (DDA), this data engine automatically adapts to any workload reliability increases, while centralized management remains simple - a single IT and maintain a Panasas storage environment (seriously – it's that easy).

availability, and security.

Rest easy with enhanced reliability,

Challenge To meet privacy and regulatory demands,

government organizations face growing urgency to secure their large datasets. Data loss, storage failures, and security breaches threaten mission-critical deadlines and – most importantly – national interests. Outdated legacy storage and multi-vendor infrastructure sprawl not only reduce data interoperability, but also increase an organization's vulnerability to these threats.



available: 1. Follow a defense-in-depth approach to

- data security. 2. Select a solution with automatic error
- recovery, continuous data scrubbing, and parallel rebuild. 3. Consolidate legacy systems onto a
- modern storage platform with a superior reliability architecture.

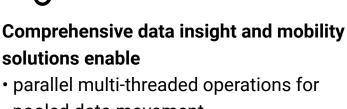


To safeguard data, Panasas takes a

Solution

defense-in-depth approach: ACLs, SELinux support, and hardware-based encryption at rest prevent unauthorized access while the realm is both online and offline with no performance degradation. The PanFS solution also uses patented client-based per-file object erasure coding to ensure maximum protection, as well as built-in prevention and automated rapid failure recovery logic to avoid corruption issues and maximize your system uptime. These are core elements of Panasas' superior reliability architecture that are not offered by other parallel file systems.

Challenge



pooled data movement, extensions for backup and archive to S3

object stores and the cloud, and SSL/TLS encryption in flight with

customer supplied keys.

- stores across multiple locations is a challenge for federal IT staff, and manual methods are quickly becoming unsustainable. Federal agencies need intelligent data insight and mobility solutions that

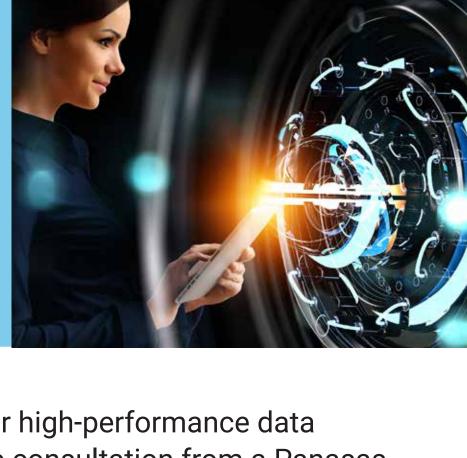
decision-making practices throughout the entire organization.

and how to best act on it is just as important as

protecting it all. Monitoring skyrocketing data

promote better data management and

Solution



If you're ready to modernize your high-performance data storage infrastructure, get a free consultation from a Panasas

federal storage expert today.

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Let's talk

For more information, visit www.panasas.com/industries/government/ Send an email to John Holtz, Director, Federal Sales at