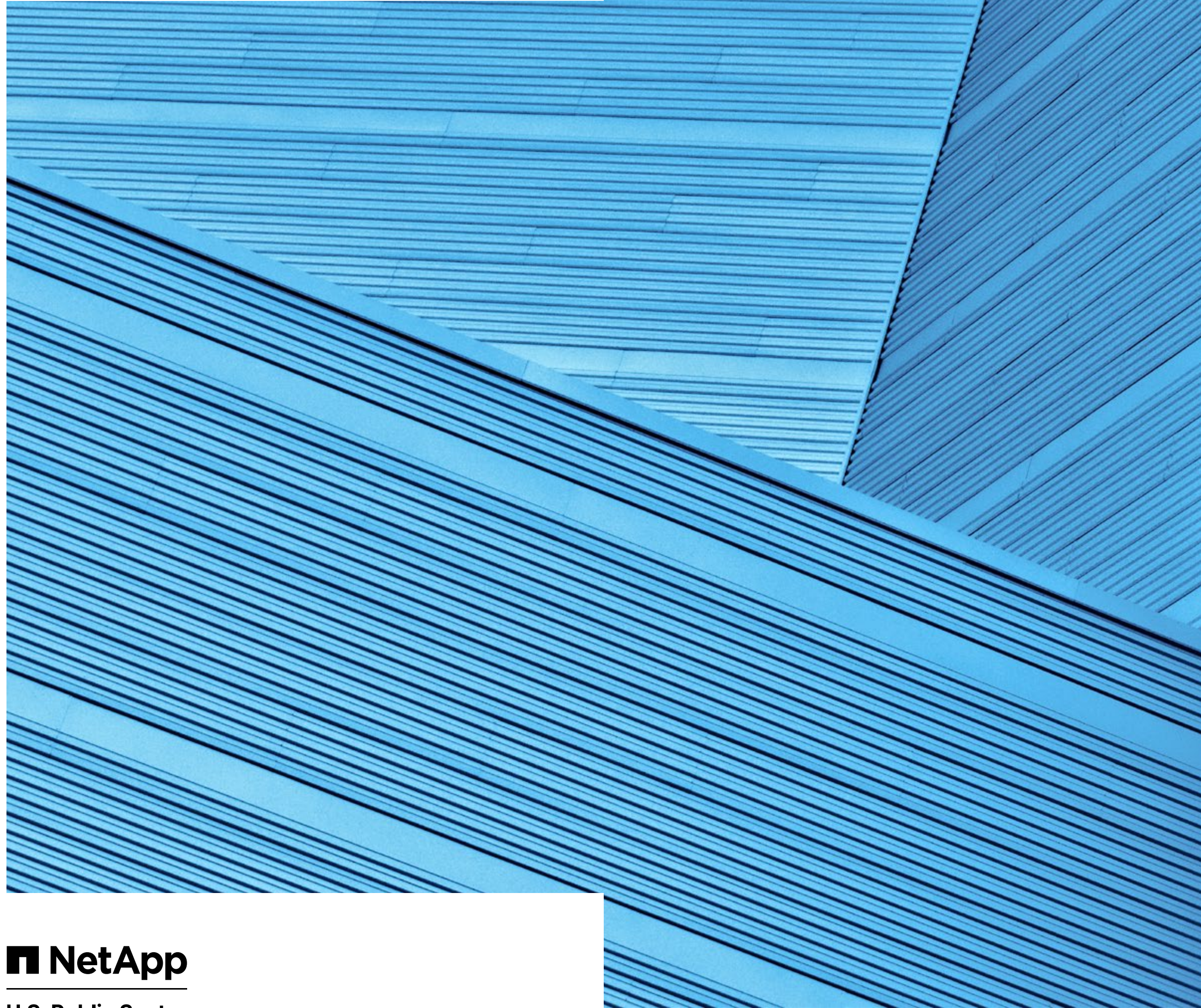**■ NetApp**

U.S. Public Sector

THE FUTURE OF AI INNOVATION STARTS WITH NETAPP

Achieve efficiency and modernization goals with AI-ready intelligent data infrastructure.

CONTENTS

NetApp
U.S. Public Sector

READY OR NOT, AI IS HERE TO STAY

The age of AI is here, with companies reporting double-digit growth in efficiency, productivity, and innovation. To fully capitalize on the power of AI, you must optimize the use of your data.

But many approaches to AI involve architectures that silo analytics, training, and inference workloads. Effective AI requires secure, seamless data movement throughout the pipeline, from ingest and data preparation all the way to analysis and tiering. Silos create unnecessary complexity, increase costs, and make it hard to scale. When a siloed infrastructure prevents data from flowing quickly and freely, AI and deep learning only scratch the surface.

Regardless of the task, government organizations need an IT infrastructure that provides high performance, easy scalability, and protection from ever-growing cyberthreats. The infrastructure must enable the organization to move faster, smarter, and more securely to increase operational efficiency, improve employee productivity, and accelerate innovation—all of which require the power and flexibility of an intelligent data infrastructure.

■ NetApp
U.S. Public Sector

THE TIME FOR AI IS NOW

99% of government leaders agree that investing in safe and effective AI is essential to fulfilling their mission.

$41.4B can be slashed from government budgets annually by implementing AI-based paperwork automation.

20%+ efficiency gains can be made by integrating AI into military supply chain management.

AI-READY, SET, GO WITH NETAPP

An intelligent data infrastructure from NetApp empowers government organizations to make any mission possible by using AI to unlock additional value from their data—enabling leaders to make informed decisions quickly and streamlining administrative processes.
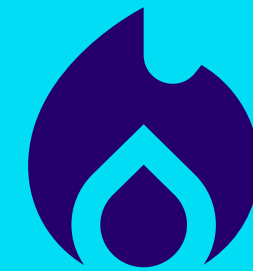
NetApp® solutions get your data AI-ready with high-performance storage that maintains the security certifications and features required by U.S. Public Sector customers. With NetApp, government agencies can get the right data and apps to the right place at the right time to meet their most critical mission objectives.

We lead the industry in high-performance, massively scalable, unified data storage that can power every segment of the hybrid AI data pipeline. Equally important, NetApp technology provides the simplicity, security, and governance required to mitigate risk so that you can confidently deploy safe, responsible AI.
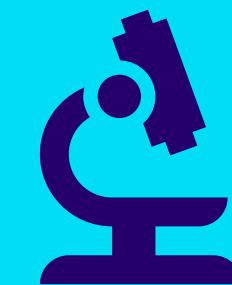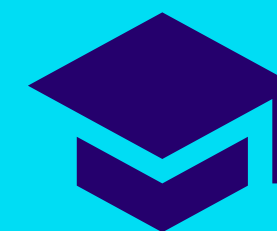
■ NetApp
U.S. Public Sector

NETAPP SOLUTIONS FOR AI IN ACTION

Built on NVIDIA Omniverse and NetApp all-flash storage, Lockheed Martin's AI systems can predict where a wildfire is likely to occur, can detect fires faster, and can quickly predict a fire's future behavior so firefighters can make faster, more accurate decisions. Learn more.

By integrating the NetApp DataOps Toolkit with NVIDIA's NeMo Retriever, Yale School of Medicine researchers are enhancing clinical and research data management for LLM training and deployment. This leads to more accurate and efficient automated data extraction, which is crucial in the quest to cure cancer. Learn more.

The University at Albany is using NVIDIA DGX Cloud supercomputing with more than 5PB of NetApp storage to accelerate AI workloads and elevate research programs. The initiative, called AI Plus, significantly expands the AI supercomputing resources available for teaching and research in New York well beyond traditional STEM applications to include the arts and humanities. Learn more.

NETAPP ONTAP:
THE FUTURE OF AI

NetApp ONTAP® software revolutionizes AI and deep learning with its cutting-edge data management capabilities.

Built on a disaggregated infrastructure, ONTAP delivers high performance and scalability by independently scaling compute and storage. It excels in handling unstructured data, transforming it into AI-ready assets with intelligent data functions.

ONTAP's robust architecture supports high bandwidth, low latency, and efficient data lifecycle management, making it ideal for AI workloads. You get seamless integration, enhanced data protection, and the ability to derive valuable insights from your data—all while optimizing costs and ensuring compliance with strict government policies.

Uplevel your AI with RAG
Having accurate, up-to-date information it critical for everything from public health and safety to national defense. Retrieval Augmented Generation (RAG) unlocks new levels of accuracy and relevance for AI deployments by securely blending your proprietary data with dynamic public data.

NetApp AI-ready storage running ONTAP provides the high performance, nonstop availability, seamless scalability, and strong cyber resilience you need to power RAG operations and support both general and domain-specific large language models (LLMs).

Potential RAG use cases include:

- Chatbots and AI-powered help desks

- Automated report generation

- Automated document processing

- Summarization and extraction of information for researchers

- Analysis of crime data for predictive policing and evidence management

■ NetApp

U.S. Public Sector

HIT THE ACCELERATOR ON YOUR AI WORKLOADS

When it comes to AI, speed is the name of the game. Having a storage solution that can keep pace with high-speed GPUs is essential.

NetApp intelligent data infrastructure solutions scale performance and capacity separately, so government organizations get the speed and space they need to feed GPUs during model training and to optimize GPU utilization. Our solutions are built to handle massive data workloads without compromising on speed or latency.

To help power next-generation AI infrastructure, NetApp collaborates with NVIDIA to deliver high-performance storage that is certified to support NVIDIA DGX SuperPOD solutions. Only NetApp storage solutions connect these pods to the rest of the enterprise and to all major hyperscalers.

With the NetApp DataOps Toolkit, data scientists can manage data directly within Jupyter Notebooks. They can create backups of entire datasets, restore previous data environments, and copy terabytes of data in seconds, speeding everything from MLOps to warfighting. The ability to create thin clones of Jupyter Workspaces accelerates time to production and allows data scientists to innovate experimentally without space constraints.

■ NetApp
U.S. Public Sector

Faster, more informed decisions

A U.S. Department of Defense agency chose NetApp to provide real-time data to an AI-infused integrated planning solution that assists in making faster, more informed operational decisions.

The performance-based, high-capacity NetApp AFF C250 is part of a data lake expansion for ongoing AI efforts to help optimize the supply chain and to eliminate rework in training, equipping, and employing ships, aircraft, and personnel to effectively support mission readiness.

85%

Amount of AI projects that fail; data access is the number one reason for failure.

Source

OPEN THE AI PIPELINE

The potential of AI is enormous, but so is the volume of data it requires. Government organizations have mountains of data, but finding the right data, in the right format, at the right time can feel like searching for a needle in a haystack.

Because data—the backbone of every AI project—is often scattered, siloed, and vulnerable, its value can easily become elusive. With a vast majority of AI projects failing, the problem isn't the technology itself. It's because the underlying data infrastructure isn't up to the task.

An intelligent data infrastructure with NetApp unified data storage at the foundation erases the hurdles that hinder AI success.

Robust data management is essential to enabling the data mobility you need to support your AI workflows. With a common operating environment across all your data, integration with the world's largest clouds, and a common control plane, NetApp solutions break down silos and allow data to flow freely throughout the AI pipeline—without sacrificing data protection and security.

NetApp's AI-optimized data management capabilities enable you to instantly classify, access, move, and serve data across any hybrid multicloud environment. From edge to core to cloud, NetApp consolidates and simplifies hybrid workflows and integrations to unlock data availability across your entire AI pipeline.

NetApp
U.S. Public Sector

YOUR TOP-SECRET DATA IS SAFE WITH NETAPP

Enable safe, responsible AI and meet data privacy and governance requirements with the only hardened enterprise storage validated to store top-secret data.

NetApp provides certified security solutions in every deployment environment needed for a successful MLOps program—NIST FIPS 140, DoDIN APL, and CSfC. Besides being CSfC certified, our solutions feature quantum-resistant encryption. Built-in, real-time AI/ML-based ransomware protection and guaranteed data recovery keep AI models and data secure.

Not only is the hardware and NetApp ONTAP data management software certified, but NetApp also provides extended features within the software to help secure your environment, including:

- Multi-admin verification
- Creation of write once, read many (WORM) volumes
- Data classification
- Immutable backups
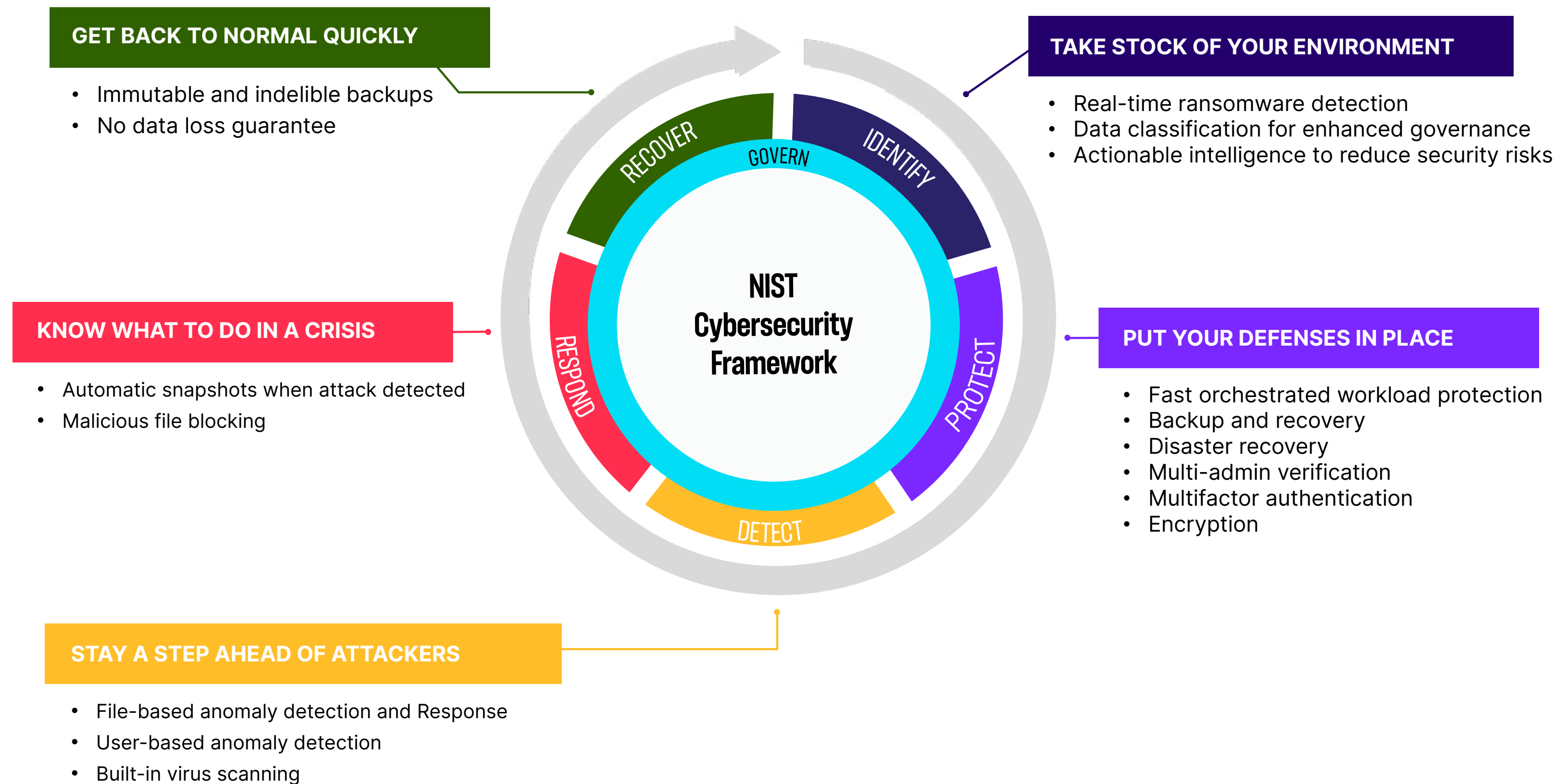- Support for extended attributes (xattrs) within NFS volumes

n NetApp
U.S. Public Sector

8

FORTIFY YOUR DEFENSE
WITH NIST-ALIGNED SOLUTIONS

NetApp solutions align with each phase of the NIST cybersecurity framework to deliver robust and resilient security that enables you to maintain data confidentiality, integrity, and availability. No matter where you are on your cybersecurity journey, NetApp solutions can help.

GET BACK TO NORMAL QUICKLY

- Immutable and indelible backups
- No data loss guarantee

TAKE STOCK OF YOUR ENVIRONMENT

- Real-time ransomware detection
- Data classification for enhanced governance
- Actionable intelligence to reduce security risks

KNOW WHAT TO DO IN A CRISIS

- Automatic snapshots when attack detected
- Malicious file blocking

PUT YOUR DEFENSES IN PLACE

- Fast orchestrated workload protection
- Backup and recovery
- Disaster recovery
- Multi-admin verification
- Multifactor authentication
- Encryption

STAY A STEP AHEAD OF ATTACKERS

- File-based anomaly detection and Response
- User-based anomaly detection
- Built-in virus scanning

RECOVER · GOVERN · IDENTIFY · RESPOND · PROTECT · DETECT

NIST Cybersecurity Framework

NetApp
U.S. Public Sector

9

UNLEASH INNOVATION

Reinvent services, improve operational efficiency, keep public health fit, and shrink the cyberthreat target with NetApp AI solutions. NetApp delivers the efficiency, protection, and integration that government organizations need to keep innovation flowing and to enable a wide range of AI initiatives to continue moving forward.

Storage-efficient data copies

Create complete, writable copies of datasets in seconds, regardless of size. Administrators can create unique repositories for teams or individual users without requiring up to 10 times the storage capacity.
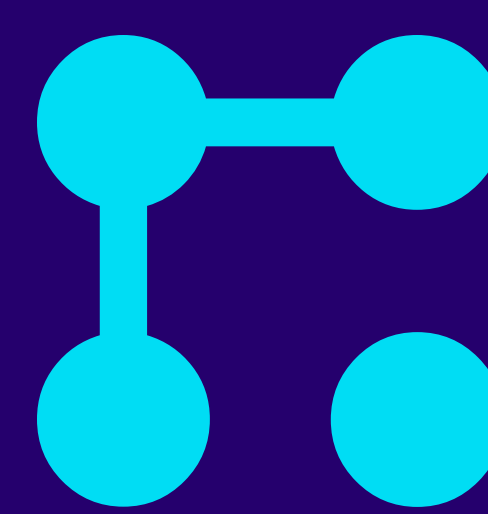
Complete data protection

Make hundreds of point-in-time backups of data volumes with NetApp Snapshot™ technology. Each Snapshot copy is an immutable set of references that can be mounted for read-only use or replicated to other systems or locations for long-term archiving or use by remote teams.

Simplified data management

Use the DataOps Toolkit to access a set of open-source Python libraries that data scientists can load into their Jupyter Notebooks, allowing them to manage data, make backups, and manage versioning— all within their own Jupyter environment.

Integrated data and model management

Go beyond open-source tools. NetApp ONTAP AI integrates with third-party toolsets and tool management solutions, so data scientists can use the tools that make sense for each workload. This integration also makes it easier to track model drift/traceability.
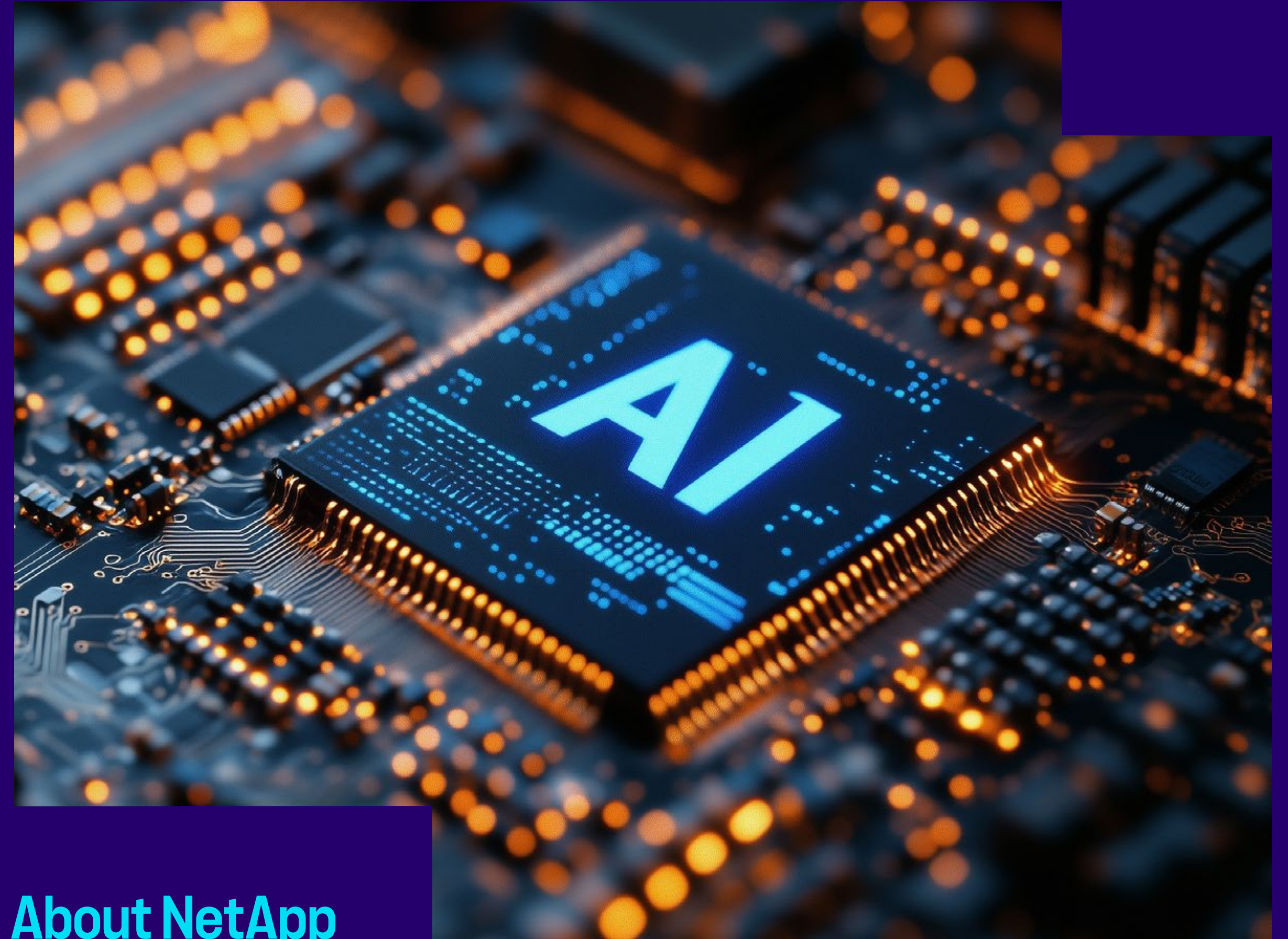
NetApp
U.S. Public Sector

BREAK THROUGH
THE AI RED TAPE

For decades, NetApp has set the standard for hybrid cloud storage of unstructured data—the lifeblood of AI. Now, we're empowering government organizations to make any mission possible by using their data to unlock value from AI—enabling leaders to make informed decisions quickly and streamlining administrative processes. Power your AI pipeline from preparation, to training, to deployment on-premises and in the cloud with the most intelligent, powerful, and secure data infrastructure.

→ **NetApp solutions for the U.S. public sector**

→ **NetApp AI solutions for government**

About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com

Contact Us

■ NetApp
U.S. Public Sector