

# Accelerate Your Data

Provide consistent performance, eliminate bottlenecks, and increase productivity as your enterprise data grows.



# Table of Contents

<b>Introduction</b>	3
Break through Infrastructure Barriers	3
<b>Meet a Variety of Workload Demands</b>	4
<b>Overcome the Pull of Data Gravity</b>	5
<b>Deliver an Effortless Cloud Experience</b>	6
<b>Ensure a Secure Data Experience</b>	7
What about Ransomware?	7
<b>Enable Modern Applications</b>	8
<b>Accelerate a Modern Data Experience with Pure</b>	9





# Introduction

## Break through Infrastructure Barriers

**Data is the new oil.** It's become a common refrain of business leaders, highlighting the immense, potential value of data as a rapidly expanding resource. Like oil, there are big rewards for those who can successfully extract and use data. Yet, with the proliferation of modern applications and personalized experiences, ensuring maximum uptime and performance is critical to gain measurable value from it as an enterprise-wide asset.

With applications rapidly evolving from traditional formats, there's no time like the present to address legacy data solutions and architectures to improve efficiencies, optimize budgets, reduce risk, and fuel innovation. This requires data storage that delivers the scale, performance, and flexibility for modern workloads and operations.

### Today's Top IT Data Management Infrastructure Challenges

---

Silos and complexity

---

Merging on-premises  
and cloud

---

Uncertain availability



# Meet a Variety of Workload Demands

Different workloads have different demands. For example, high-performance workloads need higher speeds to process data immediately. Large analytics workloads rely on greater scalability, capacity, and data access. If your infrastructure is flexible and versatile enough to meet the performance needs of all types of workloads, it can tap into rapid access of data and ensure low-latency interactions. You need the storage holding that data to meet the needs of connected and hybrid use cases while improving data experiences.

It's time for data storage that is as fast as you need it to be, scalable to evolve with your business, and easy to manage. With an operationally efficient automated storage infrastructure, it's possible to meet and exceed the modern criteria set for IT environments and deliver flawless workload performance across:



**Production**



**Pre-production**



**Dev/Test/QA**



**Analytics**



**AI/ML**



## Accelerating Genomic Research Breakthroughs

By combining a Pure Storage® FlashBlade® data hub with disk-based archiving, the Centre for Research in Agricultural Genomics (CRAG) broke through historic performance barriers to create a modern agile platform for wide-scale testing.

**Achieves 4x higher writing speeds** (from 2.4GiB/s to 8GiB/s)

**Reduces backup window by 60%**

**Provides reliable performance for intensive testing**



# Overcome the Pull of Data Gravity

Data has become the product of nearly everything we do—with digital-enabled interactions becoming the norm. Not surprisingly, this massive shift to digital has resulted in exponential increases in data being both generated and managed.

All this data holds tremendous value when it comes to unlocking insights, decisions, and innovations. But as data sets grow larger, more and more applications and services will start to use this data—making it increasingly cumbersome to move. This gravitational-like force can cause frustrating complexity, especially when factoring in business locations, proximity to users, regulatory constraints, compliance, and data privacy.

Accelerating your data means breaking free from the pull of “[data gravity](#)” to bring data as close as possible to applications and services. Moving away from 20th-century infrastructure and sprawling data silos to a single, scale-out storage platform can shrink the time and distance between data sets being processed. Data can be managed in one place, bringing applications and processing power to the data. Traffic can be aggregated and maintained in both public and private clouds, at the core and the edge. Data gravity becomes a thing of the past.



“Storage used to be one of our biggest challenges, but with Pure Storage FlashArray, it has become a non-issue.”

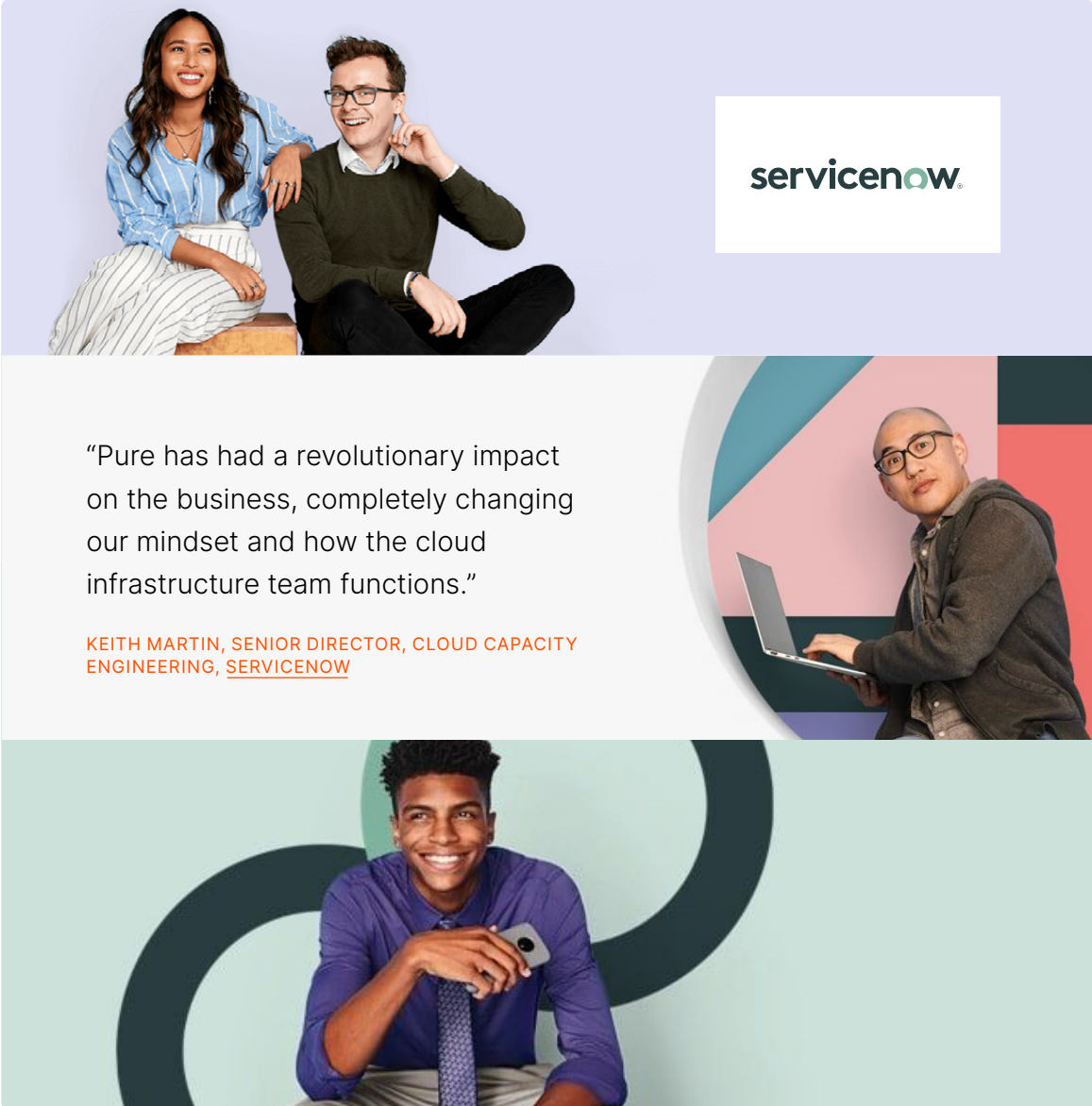
ANTHONY INCARDONA, DATABASE ADMINISTRATOR, [NOVANT HEALTH](#)



# Deliver an Effortless Cloud Experience

Along with storing, managing, and making sense of more data than ever before, there's also the challenge of [bridging the cloud divide](#). Today's applications and their data reside in multiple locations—from on-premises data centers and edge locations to hyperscale public clouds. Success hinges on implementing infrastructure that conquers this divide and its related IT data management infrastructure challenges.

A [Modern Data Experience™](#) that unifies ecosystems offers the best of on-premises and cloud, enabling flexible data and application mobility, operational agility, and unified management across your environment to scale on demand. Using the same automation tools for [private](#)- and public-cloud environments, you can develop applications once and run them anywhere.



**servicenow.**

“Pure has had a revolutionary impact on the business, completely changing our mindset and how the cloud infrastructure team functions.”

KEITH MARTIN, SENIOR DIRECTOR, CLOUD CAPACITY ENGINEERING, [SERVICENOW](#)



# Ensure a Secure Data Experience

As data volumes grow, so do cybersecurity threats. You need resilience and agility to keep data available to users and essential applications. Unfortunately, many businesses discover the hard way that their legacy data protection isn't sufficient. The resulting costs can be astounding.

Future-proofing critical IT infrastructure means having a [modern data protection](#) strategy in place. It should include solutions that safeguard application data and keep it highly available so you can recover quickly. It should enable you to:

- Back up files through frequent snapshots and control access to secure files and data.
- Replace data protection infrastructure built on legacy architectures that can't handle the stress of a ransomware attack.
- Recover quickly in the wake of an attack.

## What about Ransomware?

[Ransomware](#) has gained attention in a big way recently with a skyrocketing number of attacks targeting both the private and public sectors. The frequency and significance of attacks are growing in scope and scale, creating an urgent need for early detection and less downtime.

With today's sophisticated attacks targeting backups, a multilayered defense with a modern approach to [backup and restore](#) is essential. Backup data and backup metadata must be protected in an immutable state. By backing up files through frequent snapshots that can't be deleted, encrypted, or modified, you gain the peace of mind that your data is locked down from malicious attacks. That protected data must also be readily available to help you mitigate and even avoid the major organizational, reputational, and financial impacts of a ransomware attack.



## What Are SafeMode Snapshots?

Pure Storage [SafeMode™ snapshots](#) protect backup data and metadata by creating a secure copy. Ransomware can't eradicate, modify, or encrypt SafeMode snapshots, even with admin credentials. With just a few clicks, you can restore business-critical data quickly and at scale.



# Enable Modern Applications

[Cloud-native applications](#) have become a necessity for digital transformation. Their robustness and scalability, as well as the agility of containers and microservices, have become fundamental to how many enterprises now develop and run modern applications.

Yet, containers aren't your average storage software ecosystem. And their underlying storage can't be either. Storage must meet the unique demands of complex, distributed, and persistent workloads, without being a bottleneck. It's critical to have an enterprise-class storage solution that not only unifies environments—VMs, containers, multicloud, or on-premises—but also simplifies them.

## Attributes to look for when selecting data storage for container workloads:

- **Enterprise-grade.** To containerize mission-critical, stateful applications, you'll want the same performance and availability you depend on for your traditional Tier-1 apps. All-flash solutions with rich data services can offer enterprise-level reliability, resilience, and security.
- **Support for a heterogeneous mix of platforms.** A unified interface brings familiarity and simplicity to data management and makes it DevOps- and developer-friendly.
- **Automation.** Microservice-based environments can scale fast. You'll want automated provisioning to help with container deployment and storage needs for self-service delivery and persistent storage.
- **Support for file and block storage.** You'll want to make sure your storage ecosystem has container-specific storage offerings—whether it's software-defined storage, specialized appliances, or block storage. In particular, block storage can be beneficial for both the durability and performance of containers.
- **Cloud-native design.** You'll also want the flexibility to leverage storage consistently across hybrid environments. The beauty of containers is that they can run under different conditioners, but you'll want a storage solution that can provide underlying compatibility with consistent data services, APIs, and as-a-service consumption.
- **Standardized integrations.** The solution should integrate with container runtime engines, automation tools, and orchestration systems, including Kubernetes. Platform-native plug-ins can be mature, effective workarounds for stateful container apps.



## Driving Startup Growth with Flexible Storage

Startup incubator [Cogo Labs](#) leveraged a containerization strategy to streamline development, which included running all critical workloads on Pure Storage [FlashBlade](#) and [FlashArray™](#). [Pure Service Orchestrator™](#) integrates storage with the Kubernetes environment, bringing cloud-like flexibility to storage management.

### 15+

ACCELERATES TIME TO MARKET  
FOR MORE THAN 15 STARTUPS

### 15+

MAKES MORE THAN 15 PETABYTES  
OF DATA ACCESSIBLE TO STARTUPS

### 20%

LOWERS CLOUD COSTS BY 20% BY  
MOVING DATA ON-PREMISES





ACCELERATE YOUR DATA

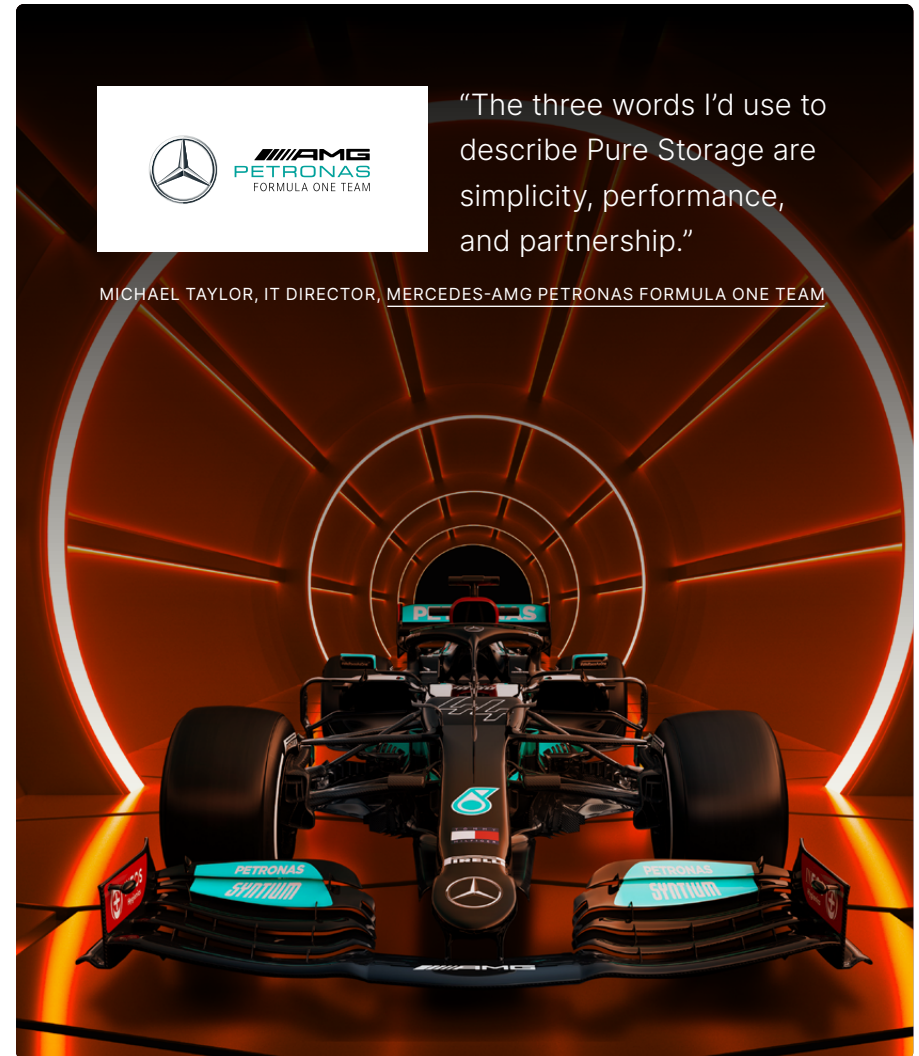
# Accelerate a Modern Data Experience with Pure

Pure Storage innovation creates a Modern Data Experience to help you utilize data, reduce complexity, and simplify the management of your infrastructure.

- **Fast Matters.** Redefine fast with all-flash performance, rapid recovery, and multiple storage classes delivered as a service.
- **Cloud Everywhere.** Unify hybrid storage with comprehensive data mobility and full-stack orchestration.
- **Smart Is Simple.** Automate and secure your infrastructure with AI optimization, cloud-based management, and predictive support.
- **Subscribe to Innovation.** Modernize your storage solution via subscription for constant innovation, without downtime or forklift upgrades.

Keeping pace with user demands is a constant challenge. Without re-examining your IT infrastructure, you risk slow response times, service disruptions, errors, and complexity. It's time to accelerate your data with storage infrastructure built for a new criteria of success—always-on, faster, efficient, simple to manage, and seamless with the cloud.

[purestorage.com/accelerateyourdata](https://purestorage.com/accelerateyourdata)



[purestorage.com](https://purestorage.com)

800.379.PURE

