

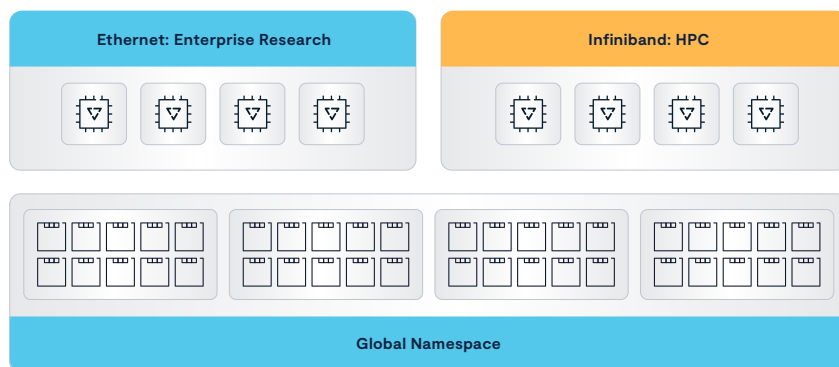
The VAST Data Platform for Research Universities



The Challenges of Data Management

Research universities face significant obstacles that hinder their operational efficiency and research capabilities. These hurdles include scalability issues, multi-tenancy, security concerns, system downtime, and complex maintenance – especially during infrastructure upgrades. The use of parallel file systems adds to these issues by causing operational inefficiencies. Additionally, managing diverse data platforms for both enterprise and HPC workloads can lead to inefficient data duplication, complex data governance, and underutilized resources. The burden of separate enterprise and high-performance systems strains budgets, complicates compliance, and limits overall operational efficiency.

Leverage VAST Data's Proven Expertise for Your Research Requirements



Optimizing Diverse HPC and Research Workloads

The VAST Data Platform excels at handling the diverse HPC and research workloads found in research universities. Whether handling datasets with large sequential IO or processing small random IO, the platform delivers exceptional performance for all IO patterns. This eliminates the need for manual tuning and simplifies operations, ensuring consistent, high-speed access. With the ability to scale compute and capacity independently, the VAST architecture makes it easy to adapt to your future needs.

VAST provides scalable, secure, and high-performance data platform to meet the diverse needs of research universities.

Why VAST?



Simplicity

Consolidate HPC and enterprise workloads into one namespace



Scalability

Independently scale performance and capacity to meet future requirements



Availability

Over 99.999% uptime, even during upgrades and expansions



Security

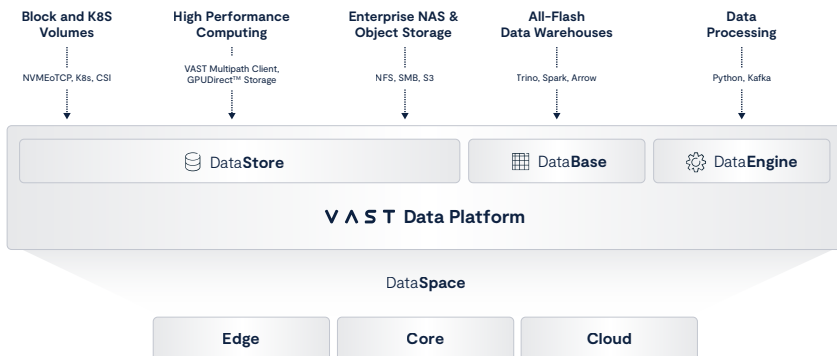
Fortify security with a zero trust, multi-tenant architecture

Multi-Tenancy in Research Environments

Research universities must be able to securely host multiple projects or tenants within the same environment, maintaining data isolation, performance predictability, and stringent security compliance. The VAST Data Platform optimizes secure multi-tenancy in HPC and research environments with a zero-trust architecture, providing robust data isolation and security without compromising performance. It encrypts data at rest and in transit, with detailed access controls and audits for strict compliance. By leveraging standard file and object protocols (NFS, SMB, S3), VAST eliminates the need for proprietary drivers, simplifying infrastructure and enhancing security, scalability and performance across workloads.

Continuous Operation and High Compute Utilization

HPC and research environments require continuous operation with high computing utilization, even during system upgrades or hardware failures. The VAST Data Platform provides over 99.999% uptime, ensuring continuous and reliable operations, with seamless upgrades and robust failure handling. This level of reliability is crucial for avoiding setbacks in research and computational workloads.



VAST Data Platform simplifies, secures, and accelerates HPC and enterprise workloads.

Trusted by Industry Leaders



About VAST

VAST Data is the leading data platform software company bringing businesses into the AI era. By accelerating time-to-insight for workload-intensive applications, the VAST Data Platform delivers scalable performance, simplifies data management and enhances productivity. Launched in 2019, VAST has become the fastest-growing data infrastructure startup in history.

Looking to simplify your data center and unlock insights from all of your data?

Contact us at hello@vastdata.com



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