

VAST Data Platform for Artificial Intelligence



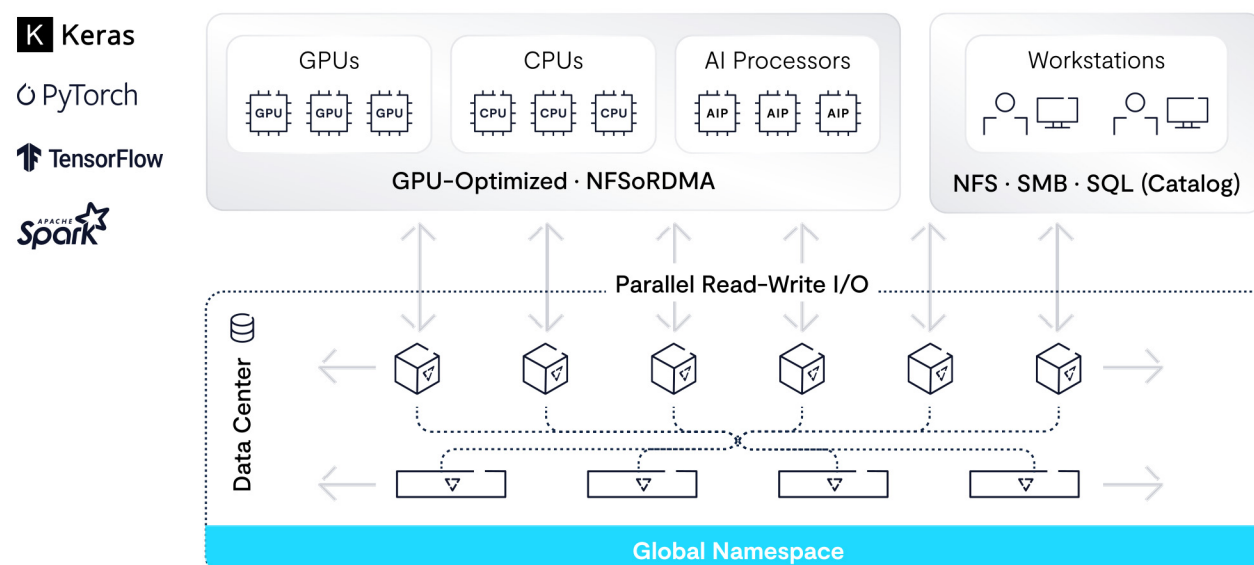
AI Meets Cloud Scale

A new wave of service providers are building GPU clouds to meet the explosive demand for machine learning and artificial intelligence. These innovators are moving beyond parallel file system solutions, traditionally used for HPC and AI workloads, and choosing the VAST Data Platform. VAST has the performance and scale to power next-generation workloads such as Large Language Models, Image Recognition, and other cutting-edge AI models, but with none of the complex operations, tuning, and fragility of parallel file systems.

The VAST Data Platform is a unified, intelligent architecture that delivers all-flash performance and enterprise simplicity for storing, inferring, and analyzing unstructured and structured data services.

Exascale Insights with Enterprise Simplicity

Designed from the ground up to make AI simple to deploy and manage, the VAST Data Platform is a next-generation distributed data store that simplifies data pipelines. VAST's inherently parallel architecture and archive economics make it possible to consolidate workloads to a secure, reliable platform that makes all data instantly available for AI. VAST is ending the trade-offs of performance, affordability, and scalability that have held organizations back from realizing their AI ambitions.



Why VAST?



Accelerate GPU-Powered Discovery

- NFSoRDMA and GPU-Optimized
- Massively parallel architecture
- Maximize GPU utilization



Secure Multi-tenant

- Parallel File System performance and scale
- Enterprise reliability and ease of use
- Always on-line upgrades and expansions



Archive economics

- No compromise data reduction technology
- All data is AI-ready on affordable flash



Multi-tenant, Multi-protocol

- QoS and secure isolation for multiple workloads
- Unified NFS, SMB, S3, and GPU-Optimized



Data Science at AI Velocity

- Transactional & Analytical database services
- Integrated metadata indexing
- Acceleration for query engines

The Data Platform for AI Era

Affordable All-Flash Data Lakes

When unstructured and structured data are unified, the barriers to insights are removed. In addition to unstructured data such as NAS and Object, the VAST Data Platform includes the VAST DataBase which is capable of both transactional and analytical structured data workloads. As AI processes and enriches unstructured data, the metadata is stored in the VAST DataBase where it can be queried to extract insights. Compatible with open standards, the VAST DataBase accelerates popular search engines for lightning-fast queries at exabyte scale.

Simplify Cloud Workflows

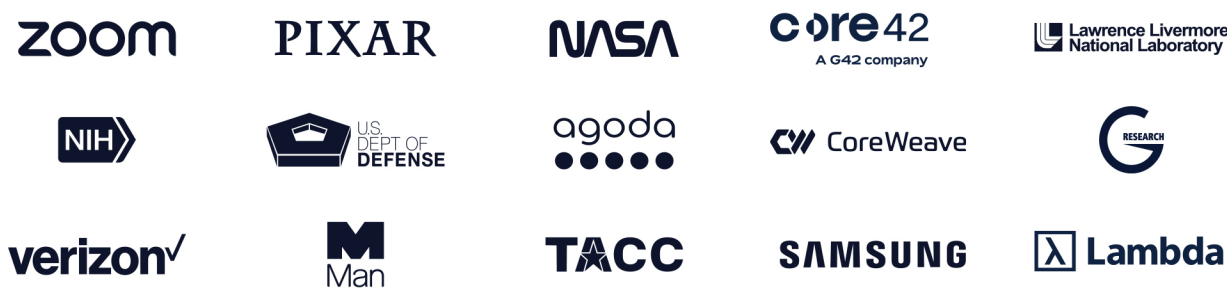
With VAST’s compounding data efficiencies, it’s affordable to make all of your data AI-ready, on-prem, or in the cloud. The VAST Data Platform makes data accessible across data centers, cloud, and edge seamless with a global namespace built for cloud bursting and collaboration.

Make the Best Choice for AI Workloads

	Legacy NAS	HPC Parallel File Systems	VAST Data
High-Performance NFS for AI Workloads	✓	✗	NFS (RDMA) + GDS
Unified Appliance, One Management UI	✓	✗	✓
Enterprise Capabilities (Flexible snaps, replication, audit, security, etc.)	✓	✗	✓
Parallel I/O for Checkpoints, MMAP	✗	✓	✓
Global Data Reduction (Similarity: VAST’s new global compression)	✗	✗	2x more efficient
Enterprise Multi-Tenancy	✓	✗	✓
Online Upgrades, Online Expansions	✓	✗	✓
Global Namespace	✗	✗	✓
Exabyte-scale	✗	✓	✓

Trusted by Innovators

VAST is trusted by leading research institutions around the world to leverage a single radically affordable all-flash innovative platform.



core42

“VAST’s unique approach to consolidating and scaling data infrastructure aligns perfectly with our vision for eliminating the barriers to AI-based discovery.”

—Talal M. Al Kaissi, Core42’s CEO

About VAST

VAST Data is the data platform software company for the AI era. Accelerating time-to-insight for workload-intensive applications, the VAST Data Platform delivers scalable performance, radically simple data management and enhanced productivity. Launched in 2019, VAST is the fastest-growing data infrastructure company in history.

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

Contact us at hello@vastdata.com



[Scan Here to Learn](#) more about the benefits of VAST for Artificial Intelligence on our website.