

VAST Data Platform for Life Sciences



Decode the Building Blocks of Life

Life sciences researchers generate and process staggering amounts of data, from genomics to structural biology to advanced imaging. AI can help them leverage this data more efficiently, but it places new demands on their infrastructure, especially data storage.

Devices that generate life sciences data sets typically default to classic enterprise storage protocols, which offer limited performance and scale. On the other hand, GPU-powered AI applications need complex parallel file systems to process the data. These mixed requirements typically result in silos of data with complex data movement pipelines.

Enterprise Simplicity Meets AI Performance

The VAST Data Platform is a new systems architecture that ends the trade-offs between scale, performance, and simplicity. VAST is the first enterprise NAS to be certified for use with NVIDIA's SuperPOD architecture, meaning it offers HPC levels of performance and enterprise simplicity. Life science teams can consolidate all workloads onto a single platform with VAST's native multi-protocol storage. By eliminating silos data management is simplified, pipelines are accelerated and time to insight is reduced.

Why VAST?



Accelerate GPU-Powered Discovery

- NFSoRDMA and GPUDirect™ storage



NAS Simplicity, HPC Performance

- Parallel File System performance and scale
- Enterprise reliability and ease of use



Archive Economics

- No compromise data reduction technology
- Consolidate all workloads to affordable all-flash



Multi-tenant and Multi-protocol

- QoS with secure isolation for multiple workloads
- Simplified workflows with NFS, SMB, and S3 access to all data



Accelerated Analytics

- Transactional and Analytical database services
- Acceleration for query engines

The Data Platform for AI-Powered Life Sciences

Unified Unstructured and Structured Data

The life sciences generate massive amounts of structured data from clinical trials, genomics, proteomics, EHRs, and more. The VAST Data Platform supports popular data science formats that allow researchers to unify structured and unstructured data on a single platform. VAST's efficiency algorithms create all-flash data lakes with archive economics and support for query engines such as Spark and Trino.

Cloud Accelerated Insights

The VAST Data Platform makes data movement across data centers, cloud, and edge seamless with a global namespace built for cloud bursting and collaboration. When researchers need massive computational resources, the VAST DataSpace intelligently makes data available across clouds for processing with optimized policies.



Trusted by Industry Leaders

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

VA | Million Veteran Program



Genomics

- 10x faster whole gene sequencing with NVIDIA Clara



Structural Biology

- AlphaFold workloads are over 7x faster compared to a parallel file system



Exabyte Scalability

- VAST is the foundation for some of the world's largest biobanks

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



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