UNIVERSAL STORAGE FOR

LIFE SCIENCES

ACCELERATE YOUR RACE TO THE CURE.

Life science organizations have long been challenged by ever-growing data and processing demands which strain current storage systems not only to hold back the deluge of data volume but also to provide sufficient performance to keep up as toolkits evolve how pipelines access and interact with data. VAST breaks the decades-old storage performance and capacity tradeoff to enable bioinformatics applications at any scale to benefit from the speed, IO consistency, and simplicity of all-flash parallel file system storage.

VAST'S KEY BENEFITS

All-Flash Performance
Performance that is 10x faster than scale-out hard drive based storage. Ideal for random and metadata intensive IO.

Tier-5 Cost Efficiency
Engineered at every level to democratize the use of flash for HPC and AI applications.

Enterprise NAS Simplicity
Simple, multi-protocol storage for any scale-out application.

THE PYRAMID IS DEAD.

Life science teams have long struggled to balance IO performance with the volume of data generated by bioinformatics pipelines. To address this, data is often tiered across a complex, pyramidal hierarchy of storage systems, each designed to provide either fast IO or large capacity. While this pyramid of storage partially solves some organization's storage problems by relegating cold data to slow, archival storage; scientists continue to evolve the questions they ask of their data. Since it is impossible to process and analyze data that's been exiled to slow, archival storage – the opportunity for rapid scientific discovery on vast reserves of data is lost. At the same time, larger pools of data create new opportunities to find new correlations – but as of now, it has not been economically practical to store the entire life science research corpus on one fast tier of Flash.

A BETTER OPTION:

VAST DATA UNIVERSAL STORAGE.

VAST Data breaks the decades-old tradeoff between storage performance and storage capacity with a new storage system architecture that enables unlimited processing on exabyte-scale, affordable Flash. With Universal Storage, pipelines run faster, administration is easier, and the data center impact is smaller.

Up to 90% Less Wait Time
With all-flash performance and fully-distributed metadata performance, Universal Storage reduces pipeline wall clock time.

Multi-Protocol Access
Applications, users, and instruments can access the same data via SMB, S3 and NFS simultaneously – thereby eliminating specialized silos of storage.

RDMA Client Access
Easily accelerate HPC & AI applications without complex PFS SW. NFSoRDMA enables clients to achieve up to 400% more performance than TCP-based file systems.

Archive Economics
VAST's Universal Storage scalability makes it possible to store, manage, process & archive all data in one scalable place.

Multi-Tenant Infrastructure
VAST server pooling capability provides dedicated QoS for competing user applications.

NAS Simplicity
One, simple-to-manage scale-out file system appliance, remotely monitored by VAST.

Sample Genomics Pipeline with VAST

millions of IOPS • TB's of throughput • exabytes of capacity