

UNIVERSAL STORAGE FOR

# QUANTITATIVE TRADING



## BACKTEST ALL THE DATA... ALL IN REAL-TIME.

Banks and hedge funds have struggled to keep pace with the needs of their quant researchers because of the inefficiencies of mechanical media and the classic tiered-storage data management model. When insights are dependent on rotational media, portfolio managers lose the ability to maximize alpha. VAST breaks the decades-old storage performance and capacity tradeoff to enable at-scale processing of market data and train AI data sets at any scale. With VAST Universal Storage, all of your market data archive can be stored on one tier of scalable, affordable flash – making it possible to backtest and train all trading models in real time.

## THE TYRANNY OF TIERS.

Trading desks have always struggled to balance I/O performance with the capacity of data that must be retained in their market data and research archives. To address this, backtest data is often tiered across a pyramid of storage systems that are designed either for fast I/O or large capacity. On the other hand, the abundance of market data that each firm maintains creates added opportunity to find new correlations and to improve the accuracy of trading models. As quants continue to evolve the questions they ask their data – it becomes almost impossible to reprocess or re-analyze data that's been exiled to slow, archival storage. The problem of storage bottlenecks has become such a contentious issue, that quants are now asking "what storage do you research on" as part of the interview process.

### VAST'S KEY BENEFITS

#### All-Flash Market Data Storage

Read and write at sub-millisecond latency across all of your namespace.

#### Tier-5 Cost Efficiency

Engineered to deliver unrivaled system efficiency, making flash affordable for all data.

#### Exabyte-Scale Cloud Infrastructure

Scale to meet the needs of all applications, with quality of service to consolidate trading teams.



# BREAKING TRADEOFFS: VAST DATA UNIVERSAL STORAGE.

VAST has broken the decades-old tradeoff between storage performance and storage capacity by engineering a new type of parallel file system and object storage architecture that enables unlimited processing on affordable flash.



### Real-Time Application

#### Responsiveness for All Your Data

Universal Storage provides a scalable, all-NVMe infrastructure.



### Multi-Tenant, Global-Namespace

#### Trading Infrastructure

VAST server pooling capability provides dedicated QoS for Trading Desks.



### Parallel File System

#### Performance, NAS Simplicity

Run dev-test workloads from the backup repository with all-flash performance.



### Archive Economics

VAST has pioneered many innovations to democratize flash: QLC flash translation, low-overhead erasure codes and groundbreaking global data reduction.

## Universal Storage sample workflow all your backup & restores on a single system



### MONTE CARLO SIMULATIONS



NFS



### MATLAB, ETC.



SMB



### AI APPLICATIONS



NFS o RDMA



## UNIVERSAL STORAGE MONOLITH SINGLE, SCALE-OUT ALL-FLASH NAMESPACE