



# Intelligently Accelerate At-Scale Financial Analytics

Financial services institutions are looking to new infrastructures to improve operations in multiple dimensions and generate granular insights faster.

DDN's Intelligent Infrastructure improves on traditional approaches to simultaneously reduce complexity, drive down cost while also improving performance as datasets grow.

## UNPRECEDENTED PERFORMANCE AND SIMPLICITY FOR ANALYTICS INSIGHTS

The markets don't wait for anyone. Realizing the gains of optimized infrastructure for AI and analytics used to take months with planning, procuring, deploying and optimizing configurations each consuming weeks or months at a time.

Leading hedge funds, proprietary trading firms and other financial institutions have been leveraging the parallel power of DDN solutions to deliver several important benefits when compared to the limited performance and scale of existing NAS file systems.

The DDN difference is our ability to deliver production proven application acceleration and scale with an efficiency not found in other storage products, even other "high performance" solutions. For instance, recent results from an independent STAC-M3™ benchmark audit demonstrate just how powerful DDN solutions are.

## EFFICIENCY THAT SCALES SEAMLESSLY

These new benchmark results, audited by STAC®, show a single DDN appliance delivering high performance and throughput using a shared filesystem.

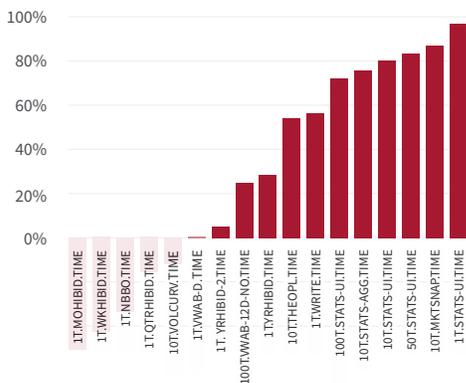
While DDN A<sup>3</sup>I storage systems can scale without limit to increase capacity and throughput, this result demonstrates extreme performance in a cost-effective form factor, with smaller footprint, less complexity and lower overall TCO than competitive storage solutions.

## DDN A<sup>3</sup>I STORAGE SYSTEMS

- Scale without limit to increase capacity and throughput
- Deliver extreme performance in a cost-effective form factor
- Lower overall TCO than competitive storage solutions
- Reduced complexity in a smaller footprint



AI400X2 vs All Flash NAS Solution - % Time Saving



These results compare [KDB211014](#) with [KDB210929](#)

The data values show percentage time saved by DDN (D) compared with time taken by Comparison solution (C)  
 Calculated as (C-D)/C\*100

The benchmark test (SUT ID [KDB211014](#)) was performed on a single DDN A<sup>3</sup>I AI400X2 all-flash NVMe appliance connected to 15 servers running the KX Systems kdb+4.0 database in distributed mode via a high-speed InfiniBand switch.

The test system outperformed a popular NFS-based configuration in 11 of 17 tests <sup>(1)</sup>, when compared to a kdb+4.0 solution using three NFS-based network-attached flash storage systems and nine database servers ([KDB210929](#)).

The test system also outperformed a popular parallel file system-based configuration in 12 of 17 baseline (Antuco) tests and 12 of 24 scaling (Kanaga) tests <sup>(2)</sup>, when compared to a kdb+4.0 solution using a parallel file system with 15 database servers and 40 storage servers on a public cloud ([KDB210507](#)).

## TURNKEY AI INFRASTRUCTURE FOR RAPID SUCCESS

DDN has removed the guesswork and risk associated with scalable storage deployment to deliver a streamlined and predictable solution for data intensive workloads. DDN's A<sup>3</sup>I systems allow you to build world-class infrastructure in just a few weeks. Execute your AI and analytics strategy with the backing of the trusted leaders in transformational data infrastructure.

## REAL WORLD SOLUTIONS FOR REAL-TIME TRADING

The primary advantages behind parallel storage are sustained high performance and the ability to easily scale upward to support ever larger workloads, but there are additional capabilities that make DDN an ideal fit to accelerate financial analytics workloads.

### FOOTNOTE 1

DDN AI400X2 was faster in 11 of 17 mean response time Antuco benchmarks, including a 11.4x speedup in single-user stats with single-user intervalized statistics, STAC-M3.β1.1T.STAT-UJ.TIME (KDB211014 vs KDB210929)

### FOOTNOTE 2

DDN AI400X2 was faster in 12 of 17 Antuco benchmarks, and 12 of 24 Kanaga benchmarks, including a 16.2x to 19.9x speedup in the four 10-user market snapshots, STAC-M3.β1.10TYR{2,3,4,5}-MKTSNAP.TIME (KDB211014 vs KDB210507)



Before we rolled out the DDN systems, our NetApp farm just couldn't keep up with the growth in the market and our business. With the DDN systems, our traders are getting new strategies into the market faster.

~ Director of IT, Global Hedge Fund



## WORKING WITH DDN, OUR CUSTOMERS HAVE REALIZED:

- Faster deployment and adoption of machine learning and AI
- Simple, linear scaling of storage IO performance as demands increase
- Over 3x improvement in algorithm development speeds
- Adaptable infrastructure that grows performance or capacity as required, on premises and in the cloud
- Secure shared access to large amounts of data over multiple, internal teams
- Lower overall TCO than competitive storage solutions

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