



# 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

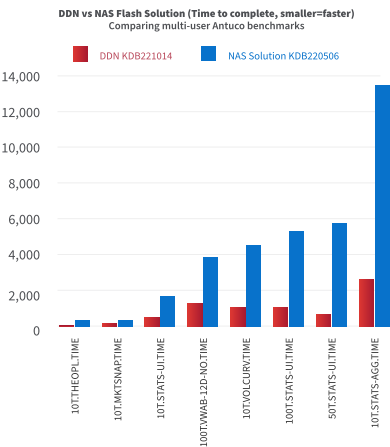
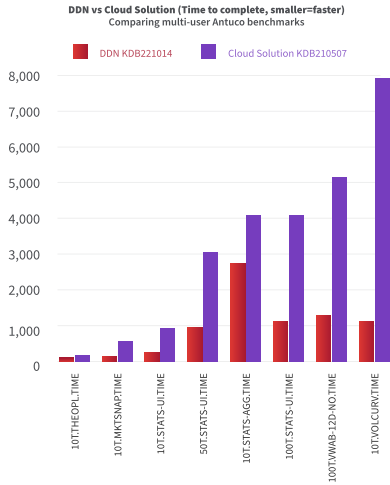
These new benchmark results, audited by STAC®, show two DDN appliances delivering high performance and throughput using a single shared filesystem.

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 and how easily DDN solutions can scale and gain performance with the addition of multiple units in a single shared filesystem.

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

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





These charts compare multi-user Antuco benchmarks for DDN and Comparison solutions.

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

**FOOTNOTE 1**

DDN was faster than a solution in a public cloud involving a parallel filesystem with 15 database servers, 40 storage servers, and previous versions of the kdb+ STAC Packs in 13 out of 17 Antuco mean-response time benchmarks, including all multi-user benchmarks (SUT ID KDB210507)

**FOOTNOTE 2**

DDN was faster than a popular network-attached flash storage in 13 out of 17 (Antuco) tests involving a system with 9 database servers, and previous versions of the kdb+ STAC Packs, including all multi-user benchmarks (SUT ID KDB220506)

### STAC M3 BENCHMARK RESULTS

The benchmark test (SUT ID KDB221014) was performed on a pair of DDN A³I AI400X2 all-flash NVMe appliances connected to 16 servers running the KX Systems kdb+4.0 database in distributed mode via a high-speed InfiniBand fabric. The test system outperformed a solution in 13 out of 17 baseline (Antuco) tests (1) in a public cloud involving a parallel filesystem with 15 database servers, 40 storage servers, and previous versions of the kdb+ STAC Packs (SUT ID KDB210507). The test system also outperformed a popular network-attached flash storage in 13 out of 17 (Antuco) tests (2) involving a system with 9 database servers, and previous versions of the kdb+ STAC Packs (SUT ID KDB220506).

The DDN solution outperforms both solutions on all multi-user Antuco benchmarks proving a superior platform to tackle highly parallel workloads (SUT IDs KDB210507 and KDB220506)

### 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 A³I 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.

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

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