



## Delivering Big Rewards in Backtesting, Risk Management, Pricing, and Fraud Detection



A large U.S. proprietary trading firm consolidated Kx<sup>®</sup> servers for 10x faster performance cost-effective, scalable support for multiple functions in a multi-tenancy environment.

A Large U.S. Hedge Fund transitioned to DDN and realized a 3x improvement in algorithm development speeds and deterministic run times.

The investment banking arm of a large international bank moved to DDN and reduced key analytics tasks by up to 80%.

A well-known online payment service used DDN to reduce detection times for fraud in credit card transactions, stopping hundreds of millions of dollars in fraud per year.

# Financial Services

- ▶ Every ATM transaction, each online trade, and any credit card tap by a customer opens endless opportunities for financial institutions to capitalize on insights gained from that data. Hedge funds, proprietary trading firms, and major banks are feeding these data sources with additional trading venues for best execution, news feeds for sentiment analysis, cross-product customer databases, and more.

And now, AI and machine learning are increasingly used to make better business and operational decisions as more financial institutions see the merits of data-driven approaches to stay relevant and competitive. Thanks to DDN solutions, leading financial institutions are finding new ways to mine these large datasets to reassess how they operate, innovate and, ultimately, be more profitable.

## ACCELERATE YOUR DISCOVERY

In this hyper-competitive industry, every fraction of a second directly translates into financial gain. Leading hedge funds, proprietary trading firms, and other financial institutions are adopting DDN's approach that lets them take advantage of parallelism.

DDN delivers demonstrably faster financial analytics for higher accuracy at lower costs with a smaller footprint. DDN platforms provide fast, scalable, external disk systems with massively parallel access to data.

With DDN, researchers and AI applications can now perform analysis against much larger datasets and quickly deliver more effective models to market. Faster access to data also allows optimized AI applications to gain deeper consumer insight and deliver relevant products and services, assist in risk assessment, and improve fraud detection and management.

## FEATURED USE CASES

Leading financial institutions have been leveraging parallel file systems such as EXAScaler to deliver several important advantages. The primary advantages behind parallel storage are sustained high performance and the ability to easily scale upward to support larger workloads. When used in conjunction with in-memory databases like kdb+, some examples of the advantages are:

- Up to 5x improvement in algorithm development speeds
- Scaling storage IO performance linearly or near-linearly as Kx servers are added
- Shared access to large volumes of data over multiple, internal teams
- Eliminate data silos and simplify data management infrastructure
- Minimizing datacenter footprint and TCO and eliminating siloed infrastructure

# DDN Solutions for Financial Services



## ▶ A<sup>3</sup>I

DDN A<sup>3</sup>I storage solutions are fully-optimized to accelerate machine learning and artificial intelligence (AI) applications, streamlining deep learning (DL) workflows for greater productivity. Working with industry leaders like NVIDIA and Hewlett Packard Enterprise (HPE), A<sup>3</sup>I artificial intelligence storage solutions harness the knowledge from customer-proven deployments to make AI-powered innovation easy. A<sup>3</sup>I is a turnkey, AI data storage infrastructure for rapid deployment, featuring faster performance, effortless scale, and simplified operations through deeper integration—all backed by the data-at-scale experts.



## ▶ DATAFLOW SOFTWARE

DataFlow™ software allows organizations to protect, manage, archive, and recover digital information simply and effectively, across any infrastructure, on any platform, over any period of time. DDN DataFlow software is an all-inclusive software solution that integrates with DDN Storage systems as well as most file, object, cloud and tape data platforms. The patented parallelized FastScan filesystem scanning technology optimizes data movement and synchronization for fast and efficient data management.



## ▶ PARALLEL FILESYSTEM SOLUTIONS

DDN's file system solutions delivers best-in-class analytics, parallel file system and NAS for the most data-intensive and performance-demanding environments. Next-generation Appliances tightly integrate award-winning DDN HPC storage technology with the power of parallel file systems to provide flexible choices for data protection and availability, offering ease of access through traditional NFS or CIFS as well as the option for high performance client access.



## ▶ BLOCK STORAGE

To perform cutting-edge workflows and analytics, our highly versatile SFA Platforms deliver award-winning technology with the necessary breakthrough performance and capacity with NVMe, SSD and intelligent disk tiering. Maximizing their innovative PCIe fabric plus the option to leverage the power of embedded processors, applications and file systems within the storage array to significantly reduce complexity, latency and data center footprint. From the performance focused SFA200NVX and 400NVX all-flash NVMe systems, to the versatile hybrid SFA7990X and the ultimate in performance and capacity with the SFA18KX, DDN has the form factor to fit the uniqueness of your use case.

### ABOUT DDN

DataDirect Networks (DDN) is the world's leading big data storage supplier to data-intensive, global organizations. DDN has designed, developed, deployed, and optimized systems, software, and solutions that enable enterprises, service providers, research facilities, and government agencies to generate more value and to accelerate time to insight from their data and information, on premise and in the cloud.

© 2021 IntelliFlash by DDN, Inc., All Rights Reserved