Oil & Gas

Outstanding performance on key applications, including Kirchhoff migration, RTM, SRME and more.
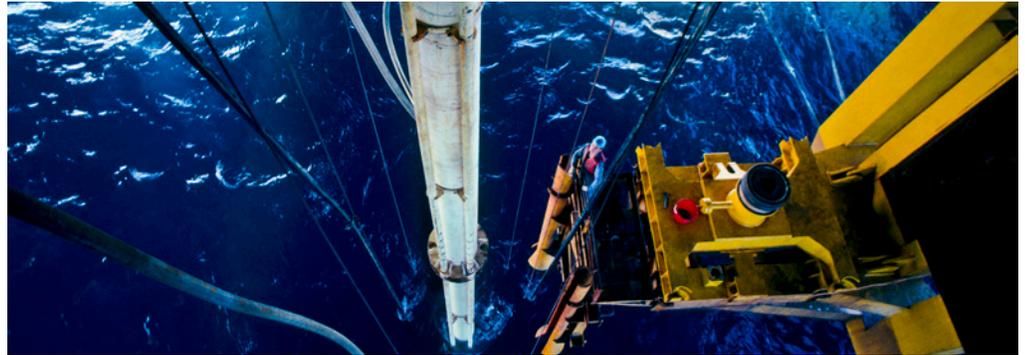
Scale seismic simulations by 10x, enabling unprecedented ROI coupled with faster time to oil.

Deliver simulation results at unprecedented speed and resolution while reducing footprint.

Execute processing and simulation workflows faster while optimizing licensing costs by leveraging embedded file systems solutions.

Quickly deploy multi-petabyte solutions, consolidate platforms and immediately accelerate advanced computing technologies to reduce time to oil production.

Speed and precision are the most valuable commodities in oil and gas exploration and production—especially with tens of billions of dollars invested in new development projects. A key competitive advantage is to have a better understanding of subsurface structures and thereby reduce exploration risk and cost. To have the greatest impact on profitability and to drive efficient exploration, oil and gas companies are turning to DDN high parallel file solutions to increase their effectiveness of seismic data interpretations, and to make critical decisions.

The Right Infrastructure Reduces Time To Energy

DDN delivers the combined capacity, performance and scalability to meet the requirements of the world's toughest seismic processing workflows. DDN utilizes fast, scalable, external disk systems with massively parallel access to data, allowing geoscientists to perform analysis against large data sets. This ultimately delivers more effective models and enable faster time to oil and gas.

To get the best subsurface view, DDN solutions are supporting oil companies to push the boundaries of scientific discovery with:

- Higher-resolution capture methods, such as wide azimuth (WAZ), which uses a multi-sensor array to produce a higher-fidelity image, as well as newer approaches, such as multi-azimuth (MAZ) or rich- azimuth (RAZ).

- Constant algorithmic evolution, incorporating new analytics techniques that allow for continued advancement in the interpretation of seismic data both for new data coming in and for historical oil field data as well.

- Artificial intelligence technologies that capture, manage, and analyze the massive volumes of data needed for accurate predictive modeling and optimized exploration.

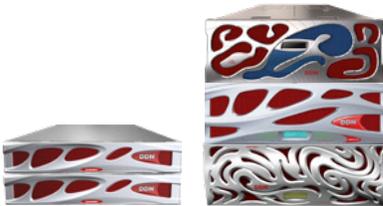# DDN Solutions for Research, Design and Manufacturing

A³I

DDN A³I 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), A³I artificial intelligence storage solutions harness the knowledge from customer-proven deployments to make AI-powered innovation easy. A³I 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.

IME

IME delivers up to 1000X application and file system speed-up with the world's most advanced application-aware I/O acceleration software, removing randomness out of workflows and reducing uncertainty and erratic performance in the cluster. This break-through storage application eliminates POSIX contentions, enabling you to convert problem I/O-bound applications into easily resolvable compute-bound challenges. Developed to drive faster time to results, IME delivers game-changing latency reduction, more bandwidth and unmatched IOPS.

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 SFA 200NV and 400NV all flash NVMe systems, to the versatile hybrid SFA7990 and the ultimate in performance and capacity with the SFA18K, 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.

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