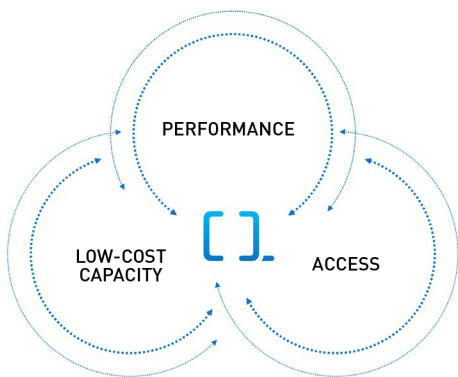


ACCELERATE AUTOMOTIVE DEVELOPMENT

With Intelligent Management of Machine-Generated Data



Photo courtesy of AutonomouStuff



With Quantum's intelligent data management solutions—built on StorNext®, the industry's fastest streaming file system—automotive companies can automate their storage policies and accelerate analysis while reducing overall storage costs.

PERFORMANCE

- > Automate storage tiering to ensure data is on the right technology at the right time
- > Tune performance independently from capacity to optimize performance and reduce cost
- > Ingest data fast—from sensors, cameras, and other devices—to accelerate testing and analysis
- > Integrate data protection to eliminate backup windows and backup software, and their impact on performance

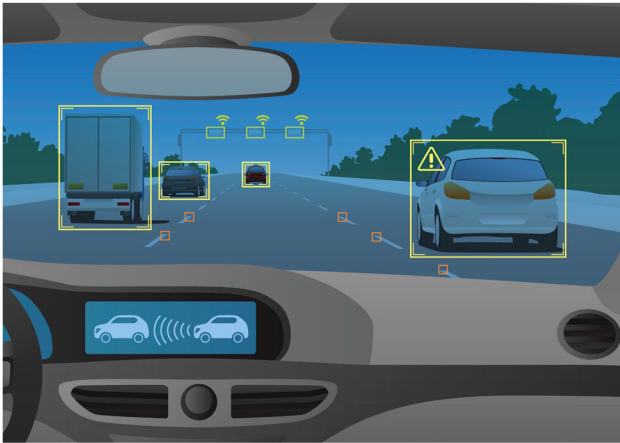
ACCESS

- > View files transparently for easy access regardless of storage tier—flash, disk, object, tape, or cloud
- > Share simultaneous access to files across multiple network protocols—including LAN and SAN—and operating systems—Windows, Mac, Linux, and UNIX—for improved productivity
- > Seamlessly integrate cloud storage today with the flexibility to adapt as new requirements or technologies develop in the future

LOW-COST CAPACITY

- > Integrate low-cost storage tiers—such as cloud and tape—with high-performance storage tiers—such as SSD and disk—for high-capacity, high-performance storage at the lowest TCO
- > Seamlessly scale low-cost capacity for improved cost management and investment protection

Autonomous Vehicle Development



COMPANY: Global automotive supplier

CHALLENGE:

- > Massive data growth created by higher sensor and camera resolutions, and more devices per car
- > Data volume increasing from 1PB today to over 20PB in 10 years
- > Fast daily ingest from test vehicles—up to 20TB per car, per day—for engineering access
- > High-performance support of engineering testing and analytics computing
- > Total budget: USD 2 million

SOLUTION:

- > Quantum Xcellis™ Workflow Director, powered by StorNext
- > StorNext QXS™-5600 performance storage
- > StorNext AEL6000 archive storage

CUSTOMER BENEFITS:

- > Shared storage simplifies workflow, eliminating storage silos
- > High-speed ingest and faster performance support high-performance computing (HPC) analytics and accelerate development
- > Automated data protection without backup software
- > Easier collaboration with international teams using common data sets
- > Cloud ready—public and private
- > Performance and capacity can be added independently for future needs and budget control
- > Total cost: USD 1.6 million—not only meeting the budget, but 10 times less than the alternative solution (USD 15 million)

Quality Assurance / Production Monitoring



COMPANY: Global automotive supplier

CHALLENGE:

- > Long-term retention of circuit board manufacturing files
- > Support for large digital images and video sequences, including storage for five years
- > Fast and easy file access for QA and return investigations
- > Aggressive budget constraints, requiring tight cost controls

SOLUTION:

- > Quantum Xcellis Workflow Director, powered by StorNext
- > StorNext QXS-5600 performance storage
- > StorNext AEL500 archive storage

CUSTOMER BENEFITS:

- > High-speed ingest saves time
- > Automated storage tiering provides cost-effective solution
- > Unlimited and non-disruptive system allows capacity growth without downtime
- > Cloud ready—public and private

University Research



COMPANY: GWDG, a computer center shared by Germany's Göttingen University and the Max Planck Society

CHALLENGE:

- > Create a 7PB storage solution accessible from a single file system with over 10 years of data retention
- > Manage billions of files and huge data volume for more than 40,000 users
- > Support many operating systems, including UNIX, Linux, Windows, and Mac
- > Enable HPC processing with shared storage over Ethernet
- > Provide flexibility for future, unknown requirements

SOLUTION:

- > Quantum Xcellis Workflow Director, powered by StorNext, with Distributed LAN Clients (DLCs)
- > StorNext AEL6000 archive storage

CUSTOMER BENEFITS:

- > Single file system manages billions of files and multiple petabytes of data, with integrated data management and data protection
- > Simultaneous access across a full range of operating systems
- > High-speed performance via StorNext DLC over Ethernet IP exceeds requirements by 50%
- > Easy-to-manage and scale system allows a small staff to support a large storage environment
- > Automated data protection includes automated retrieval of protected copies—saving time and improving user productivity
- > StorNext File System's proven track record of integrating technologies and scaling to meet evolving workflow demands
- > Cloud ready—public and private



Photo courtesy of AutonomouStuff



ABOUT QUANTUM

Quantum is a leading expert in scale-out tiered storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle.

- > Quantum is a storage specialist with over 35 years of experience.
- > Over 100,000 customer deployments have been sold in over 100 countries.
- > StorNext is the fastest streaming file system. For 19 years, we have enabled the most demanding workflows including: HPC, genomics research, autonomous vehicle development, video production and broadcast, government research, intelligence and security, and more.

