Accelerating Autonomous Vehicle Development with Intelligent Data Management

MORE SENSORS – MORE CAMERAS – MORE CHALLENGES

Advances in the development of autonomous vehicles are happening at a blistering pace. Vehicle manufacturers are racing towards the fully autonomous vehicle of tomorrow, and deploying the enabling technologies, as they're proven out, in vehicles today. The need to stay competitive in this dynamic market is driving significant investment by the vehicle manufacturers and their technology partners.

The number of sensors and cameras mounted on vehicles continues to increase, creating increases in the volume of data being generated. The huge growth rate of test data is straining the development process in many ways, including: the interruption of tests as in-vehicle storage runs out of capacity; engineers' access to test data is delayed due to backlogs in the upload process; storage costs are breaking program budgets; collaboration across geographic and company boundaries is difficult.

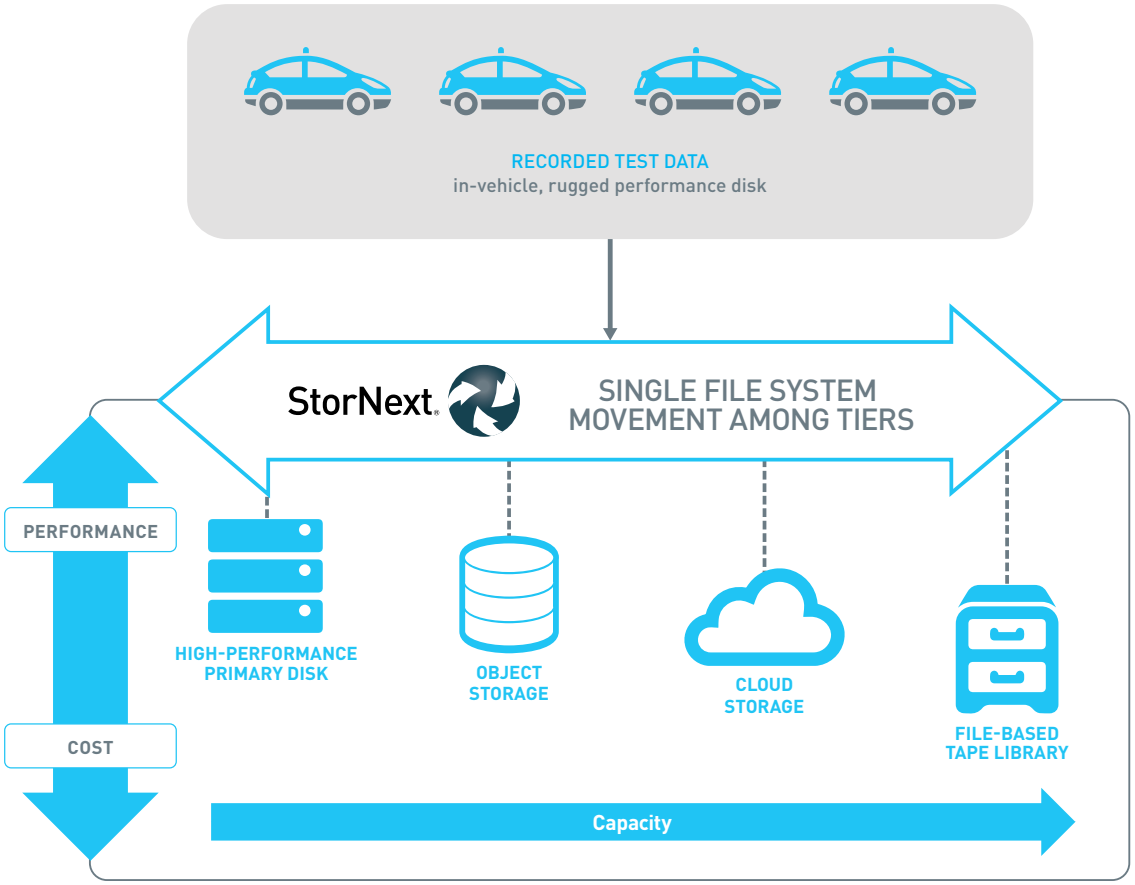
Traditional IT storage solutions cannot scale affordably to support the massive growth of data generated from these new development processes. Technology providers and manufacturers need solutions that can scale capacity on-demand and cost-effectively, while enabling easy access to data for the development team. Intelligent solutions are needed that balance performance with cost, recognizing that some data is more active than others. The promise of safer, more autonomous vehicles is exciting, and intelligent storage solutions can accelerate the delivery of that promise.

StorNext®

SOLUTION BENEFITS

- **Lower costs of storing more data**
  Store data on the right technology at the right time to optimize performance and cost.
- **Seamlessly scale to multiple petabytes**
  Manage growth (new contracts, new projects, new models, new cameras & sensors) without breaking the budget or the development process.
- **Shared access**
  Increase productivity and collaboration with simultaneous file sharing via SAN and LAN, for NFS, CIFS, StorNext, S3 and HTTP REST.
- **Self-protected storage**
  Set policies to create redundant copies of data for DR and data protection.
- **Fast data ingest**
  Upload test data in hours, not days, for faster developer access.
- **Simple deployment**
  Integrate seamlessly with existing processes and infrastructure.

Figure 1 - Intelligent tiered storage solution accelerates the development process.



TIERED STORAGE: IDEAL FOR AUTONOMOUS VEHICLE DEVELOPMENT

A tiered storage solution, built on the StorNext® platform, seamlessly integrates into your existing storage infrastructure, enabling the right mix of performance and cost while maintaining complete data access. Active data is stored on high-performance storage to meet testing and analysis requirements while inactive data is automatically moved to less-expensive storage tiers, like object, cloud, or tape automation. The NAS interface provides simple and consistent access to all data regardless of which tier it is stored on. Capacity and performance can be scaled seamlessly and independently as needed.

With a tiered storage solution, you maintain control of your storage infrastructure, even when unplanned events arise, and enable the development team to accelerate their pace of innovation.

SOLUTION COMPONENTS

- Xcellis® Appliance, powered by StorNext
- Lattus™ Object Storage
- Scalar® Tape Library
- Public Cloud (AWS, Google, Azure)
- QXS™ Hybrid Storage

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. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at **www.quantum.com/customerstories**.

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