QF2 for ADAS

Developing Advanced Driver Assistance Systems (ADAS) requires file storage at unprecedented scale. QF2 is a modern file system, designed to handle multi-petabyte data sets. QF2 easily scales as your data grows and gives you real-time visibility into the storage system, down to the file level, within a single namespace.
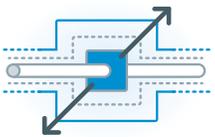
Get results faster

Whether you perform hardware-in-the-loop (HIL) tests in real time, software-in-the-loop (SIL) simulations, or have demanding machine-learning workloads, there is a QF2 cluster that suits your needs.

Choose hybrid, SSD/HDD QF2 clusters, available either on Qumulo standard hardware or HPE servers to get the performance you need to complete your HIL and SIL tests quickly for a faster time to market.

If you are training neural networks you need top performance. QF2 NVMe all-flash clusters deliver the best price performance of any SSD file system.

Scalability

You can add capacity to your QF2 cluster in just a few minutes, without any down time. Every node you add increases aggregate and peak performance as well as capacity so your storage system grows in accordance with your business needs.

Efficiency

QF2 makes 100% of provisioned disk capacity available, as opposed to the 70%-80% promised by legacy storage vendors. Save on the number of disks you'll need as well as on rack space and infrastructure costs such as cooling and power.

Real-time visibility and control

QF2's visibility and control let administrators get answers and solve problems in real time. It's easy to identify performance hot spots and instantly apply quotas, or to specify how much storage each ADAS project should receive. The capacity explorer and capacity trends tools let the IT team see how their storage is being used now and over time so they can plan sensibly for the future and not worry about overprovisioning.

Universal-scale file storage

Scales to billions of files
Use any mix of large and small files and store as many files as you need. There is no practical limit with QF2's advanced file system technology.

See a single volume
A QF2 cluster always appears as a single volume, no matter how many nodes it has.

Your data anywhere
QF2 runs in the data center and in the public cloud. Continuous replication moves the data where it's needed when it's needed.

Highest rated support
Get help fast from our team of storage experts with your own Slack channel.

Simple subscription pricing
A single, simple subscription model covers everything, including all features, updates and support.
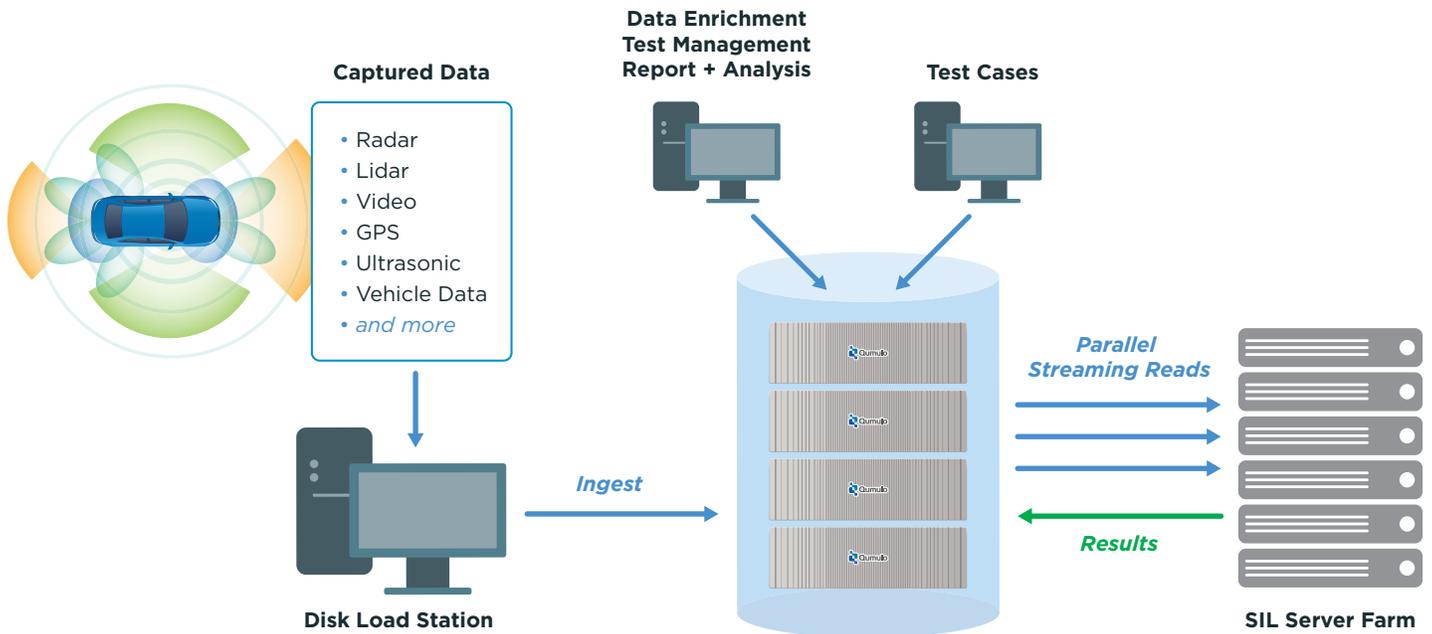
"Managing data with QF2 is so simple it's hard to describe the impact. It has given us tremendous ROI in terms of time saved and problems eliminated, and having that reliable storage we can finally trust makes us eager to use it more broadly throughout the company."

John Beck
IT Manager
Hyundai MOBIS

ADAS SIL Workflow

Here is an example of a SIL workflow, where software simulates the behavior of an electronic control unit (ECU).

Captured Data
- Radar
- Lidar
- Video
- GPS
- Ultrasonic
- Vehicle Data
- *and more*

**Data Enrichment
Test Management
Report + Analysis**

Test Cases

Disk Load Station

Ingest

*Parallel
Streaming Reads*

Results

SIL Server Farm

The captured sensor data is transferred to QF2, typically over SMB. From there the SIL servers retrieve it, resulting in many parallel read streams. The servers send the data, along with the test cases, out to the simulation software and then send the results back to the file storage system. Data enrichment is the tags that are added to the video. The footage needs to be labeled and indexed so that developers can query for specific video sequences.

About Qumulo

Qumulo is the leader in universal-scale file storage. Qumulo File Fabric (QF2) gives data-intensive businesses the freedom to store, manage and access file-based data in the data center and on the cloud, at petabyte and global scale. Founded in 2012 by the inventors of scale-out NAS, Qumulo serves the modern file storage and management needs of Global 2000 customers. For more information, visit http://qumulo.com.

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