



Infinite Capacity: Break Free from Hardware Capacity Constraints

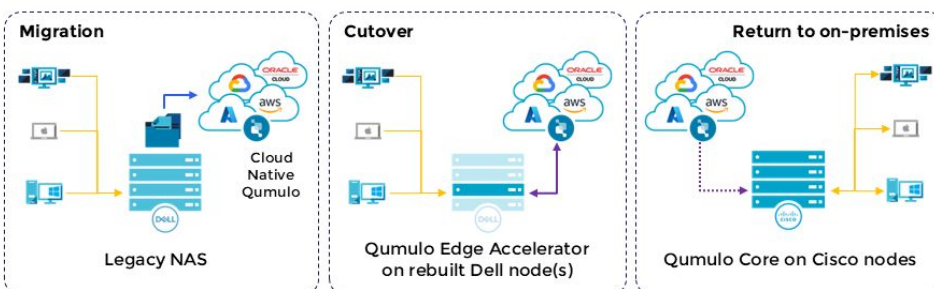
Capacity in Minutes, not Months

ANY DATA
ANY LOCATION
TOTAL CONTROL

EXECUTIVE SUMMARY

Eight of the world's top ten AI models are cloud-exclusive, and 70% of AI workflows now run in the cloud — yet more than 200 exabytes of enterprise data still sit in on-premises data centers. Cloud provider demand is driving hardware prices up 50–400% and stretching lead times from weeks to months, while AI accelerates unstructured data growth and demand for storage, compute, and networking.

Copying all that on-prem data to the cloud adds cost, complexity, and can take months. Qumulo Infinite Capacity closes this gap by giving enterprises access to additional capacity in minutes, not months. Organizations can use existing infrastructure while extending data into elastic cloud capacity, reclaiming valuable on-premises space without waiting for new hardware or committing to a disruptive full-scale migration.



THE CHALLENGE

The five largest cloud providers now collectively spend more on infrastructure than many national governments spend in their entire federal budget. Enterprises must rethink their timing, infrastructure projects, and dependency on large capital hardware purchases.

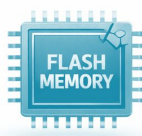
High Confidence Trends:



Hardware prices will continue to surge



Wait times will remain unpredictable



Flash memory will become increasingly scarce



On-premises and cloud TCOs will converge

KEY BENEFITS

With Qumulo Infinite Capacity, enterprises can:

- Extend on-premises data to the cloud in minutes — no migration, no duplication
- Free up on-prem capacity for growth, failure spares, or GPU-hungry workloads
- Preserve full dataset visibility and access, as though data is still local
- Run on the hardware you already trust, from any vendor — no lock-in
- Minimize user disruption while modernizing on your own timeline

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THE SOLUTION: YOUR OPTIONS

Option 1: Add Capacity Immediately

Reduce hardware timing and pricing pressure, without disrupting users, using Qumulo Infinite Capacity to extend beyond the capacity of the hardware you already own.

1. Deploy cloud-native storage — Cloud Native Qumulo (CNQ) on AWS, Azure, Google Cloud, or OCI, or Azure Native Qumulo (ANQ), plus an on-premises Qumulo Edge Accelerator — all unified by Qumulo Cloud Data Fabric (CDF)
2. Migrate selected workloads, archives, backups, or application tiers to the cloud while maintaining seamless on-premises access
3. CDF makes your complete data estate appear local through the on-prem Edge Accelerator, even when distributed across cloud and on-prem, without the cost and complexity of replication

Once new hardware arrives, migrate data back on your own schedule — or leave it in the cloud if that works better.

Option 2: Optimizing On-Premises Footprint

Change your architecture to need less on-premises hardware. Migrate workloads to the cloud and use small-footprint edge caching devices — such as Cisco Unified Edge or comparable hardware — in place of large on-prem storage arrays.

1. Redeploy reclaimed hardware for new on-prem workloads
2. Use an easy-to-deploy, cost-effective hybrid infrastructure of your choice
3. Rely predominantly on cost-effective spinning disks, if new hardware must be purchased, plus small flash-based front-end caches for performance
4. Deliver local-like performance with less hardware and lower cost

Option 3: Re-architect to a Permanent Hybrid-Cloud Model

Add capacity immediately with Qumulo Infinite Capacity, as described in Option #1. Instead of buying more of the same hardware as before, however, buy smaller-footprint edge caching devices that will provide local-like access all the data you've migrated to the cloud. This approach frees capacity immediately and streamlines the larger transition to the cloud on your own timeline, while still delivering high-performance access to data on-premises, in the cloud, and at the edge.

THE RECOMMENDED PATH FORWARD

Whatever long-term approach best fits your strategy, deploying CNQ or ANQ now can relieve most of your capacity pressures within days.

Quick-Win Approach: Move low-value or infrequently accessed data to CNQ Cold (or ANQ Cold), freeing up space in high-value on-premises systems using your choice of high-speed file migration tool, such as Qumulo SLURP, Atempo, or Komprise for more complex archive environments. If you prefer familiar tools such as Rsync, Robocopy, or Rclone, those are fully supported as well.

Strategic Approach: Spend 2–3 hours in a Hybrid Architecture Envisioning Session with a Qumulo Solution Architect and a whiteboard — evaluating user experience, performance bottlenecks, and application or container integration strategies — often saves months of rework in later phases.

THE RECOMMENDED PATH FORWARD, CON'T

Select the strategy that best fits your requirements:

Strategy 1: Buy time, not new infrastructure, and immediately relieve capacity constraints.

Strategy 2: Buy less hardware in the future, and lower your costs by shifting to the cloud.

Strategy 3: Modernize your entire data platform with a cloud-first operating model.

BUSINESS OUTCOMES

- Minimized exposure to hardware inflation and long delivery times
- Reduced dependency on high-cost flash storage
- Flexible migration timelines
- Seamless continuity with zero post-migration user disruption
- Future-proofed data architecture that accelerates access to cloud-based GPU pools and AI workflows

CONCLUSION

The hardware shortage is not temporary. Flash scarcity and supply chain constraints will continue reshaping enterprise economics. Qumulo Infinite Capacity gives organizations another option: add the capacity they need in minutes instead of waiting months for new infrastructure. Enterprises can relieve immediate capacity pressure, preserve flexibility, and modernize their architecture on their own timeline.

THE QUMULO DIFFERENCE

If you are considering trying this with any cloud data solution, you should consider the benefits of Qumulo's cloud solutions versus alternatives. With Qumulo, you can:

- Migrate existing file workloads to the cloud without the need to refactor applications
- Scale both performance and capacity, independently and elastically
- Pay only for what you use with pay-as-you-go pricing
- Deliver familiar multi-protocol NAS functionality from a self-managed or fully-managed cloud environment
- Lower TCO by up to 80% compared to other cloud-based services
- Choose any cloud – AWS, Azure, Google, or OCI
- Access and manage the same file data platform seamlessly in the cloud, on-premises, and at the edge
- Enable real-time global collaboration without costly, time-consuming replication or duplication
- Deliver local-like performance to users anywhere
- Project data in real time from where it lives to where it's needed

ABOUT QUMULO

Qumulo is the leading provider of cloud file data platforms, offering unrivaled performance, scale, and data management solutions. Qumulo's platform is trusted by Fortune 500 companies and global enterprises to manage petabytes of data, enabling them to unlock the value of their data and drive innovation. For more information, visit www.qumulo.com.