

# Save Days in Post-Production with Nyriad & ATTO Technology

The ATTO logo is a white rectangular box with the word "ATTO" in a bold, sans-serif font inside.

## THE CHALLENGE

Throughput and performance bottlenecks within network and storage environments can make it difficult to perform real-time video scrubbing or in-line editing on raw footage. Frequently, editors must ingest raw footage, copy it locally, and spend hours - in some cases days - creating lower resolution proxies before beginning the editing process. Once that process is complete, the final output then needs to be rendered at the desired end-stage resolution and copied back to the main repository.

This proxy process can delay the start of even small projects by days. Creating proxies also doubles the number of project files - wasting storage capacity, increasing storage management overhead, and increasing network traffic.

Data resiliency often comes with huge pitfalls and setbacks in today's legacy RAID storage environments. Shared storage solutions typically only protect against two simultaneous drive failures. Worse still, when copying data locally, oftentimes customers resort to RAID-0 striping for performance needs in lieu of protection. Customers can be as little as one drive away from catastrophic data loss and may only be able to withstand two drive failures even when the system is running optimally.

## THE SOLUTION

The Nyriad® UltraIO™ storage system's revolutionary new architecture leverages the speed and power of both GPUs and CPUs in a block storage platform to deliver an unprecedented combination of simplicity, performance, resilience, integrity, and efficiency.

ATTO FastFrame™ 3 SmartNICs and ThunderLink® Thunderbolt™ adapters are purpose-made to support high-performance media using exclusive technology that reduces network latency to as low as 1µs while smoothing data streams for consistency and reliability.

Pairing Nyriad's UltraIO storage system with ATTO FastFrame™ SmartNICs and ATTO ThunderLink® Thunderbolt™ to Ethernet adapters removes the bottlenecks that previously hindered the media editing process while increasing fault tolerance for improved data protection.

Bandwidth reductions caused by transmission control protocol overhead make many NICs incapable of supporting 8K video. ATTO FastFrame™ 3 SmartNICs utilize RoCE to free up the full pipeline, providing the bandwidth needed for multiple streams of raw 8K and 4K video. Additionally, with ATTO 360™ Tuning, Monitoring, and Analytics Software, Ethernet storage networks can be optimized for media workflows with just a single click.

## NYRIAD AND ATTO SOLUTIONS ENABLE THREE MAIN BENEFITS IN YOUR MEDIA & ENTERTAINMENT ENVIRONMENT



### PERFORMANCE:

Using the UltraIO system and ATTO unlocks up to a 400% increase in write throughput, enabling the scrubbing and editing of raw 8K and above video footage inline without the need to transcode, create proxies or copy files across the network to local editing stations. This can save days in time from the setup of new projects. UltraIO's available throughput speeds of up to 20 GB/s can support multiple editing suites and rendering activities to run simultaneously, allowing multiple projects to proceed in parallel using the same infrastructure resources while improving business efficiency. The UltraIO system unleashes the true power of ATTO 10/25/40/50/100Gb Ethernet adapters, allowing them to run at near-line rate.

### RESILIENCY:

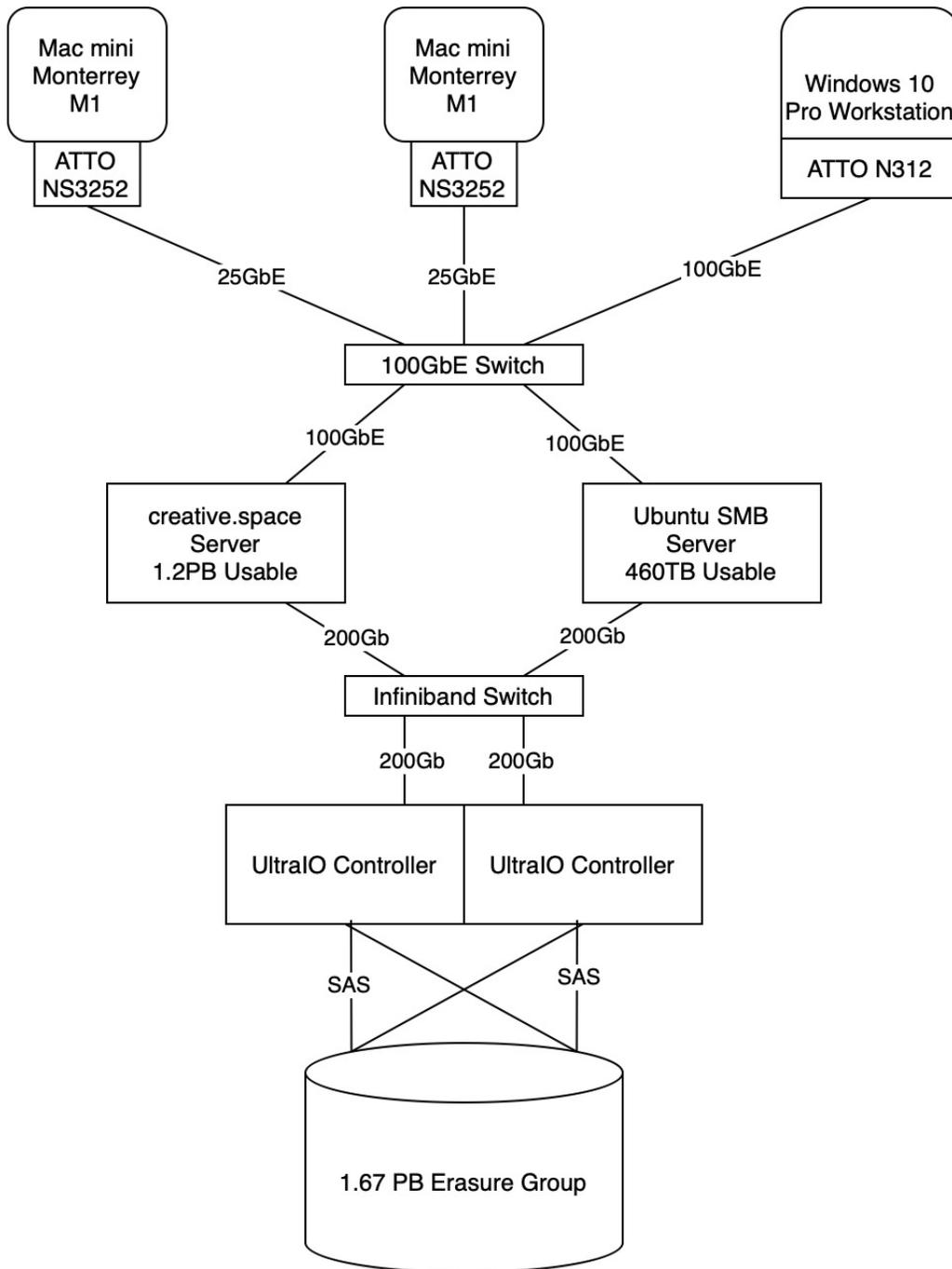
The UltraIO system's resiliency, coupled with ATTO's dual port interfaces, enable organizations to keep working even in less than optimal situations. UltraIO can withstand up to 20 drives failing simultaneously while maintaining up to 95% of its maximum throughput (when a 204 drive system is configured with 20 parity). Dual-port ATTO interfaces can survive the loss of entire switch fabrics without any outages.

### EFFICIENCY:

Exclusive ATTO features like Advanced Data Streaming™ and ATTO 360 Tuning Software optimize productivity without requiring expensive workstation refreshes. The UltraIO system provides outstanding storage efficiency, allowing organizations to use up to 90% of the raw capacity deployed in their environment.

**SUMMARY RESULT**

The streamlined editing process made possible by the combination of ATTO and UltraIO and the peace of mind provided by the improved data resilience are truly transformative to a digital media studio's business and overall operational efficiency, providing a significant competitive advantage.





## ABOUT NYRIAD

Nyriad, Inc. is the developer of the UltraIO™ storage system, an all-new system that combines the processing speed of GPUs and advanced algorithms to deliver unprecedented performance, resiliency, and efficiency. The ground-breaking design enables UltraIO systems to support block storage media and block, file, and object data types in a single system for maximum flexibility. Nyriad UltraIO systems run on industry-standard hardware and use the highest capacity, most efficient storage media and simplified storage management to achieve low total cost of ownership. Nyriad empowers businesses to grow and adapt their storage to stay competitive in a data-driven world.

## ABOUT ATTO

For over 33 years ATTO Technology, Inc. has been a global leader across the IT and media & entertainment markets, specializing in network and storage connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works with partners to deliver end-to-end solutions to better store, manage, and deliver data.

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