



Revolutionize Your Research Data Storage with ActiveStor Ultra Edge

SOLUTION BRIEF

When it comes to high-performance storage that can scale to meet research data needs, researchers have had to choose between two options with significant drawbacks:

- 1. Building their own open-source storage solution.** Open-source options require considerable effort and expertise to install and maintain, and most labs do not have the time or the staff to devote continuous effort to managing their research infrastructure.
- 2. Purchasing an expensive commercial storage product.** This option puts a significant strain on budgets, and a large, expensive storage system simply doesn't make sense for labs with a single microscope, a few benchtop sequencers, or bioinformatics workflows that outsource raw data generation.

What researchers need now is a third option – a reliable, compact, and scalable storage solution that can immediately support their Cryo-EM microscopes and benchtop sequencers. It must be easy to install and maintain, cost-efficient, and deliver the high performance required to power their data-intensive applications.

Enter Panasas ActiveStor® Ultra Edge.

Get scalable storage for research data with an approachable entry point

With the ActiveStor Ultra Edge solution, researchers can now support their instruments and workflows with an entry-sized platform running the Panasas PanFS® data engine, a mature and stable parallel file system designed to handle the diverse and unpredictable workflows in life sciences. With a modest entry point and unlimited scalability, ActiveStor Ultra Edge keeps up with any pace of research needs and delivers the following advantages.

- 1. A truly simple storage experience.** Consolidate diverse data workloads on a single solution with easy, centralized storage management and a minimal learning curve.
- 2. Limitless performance and capacity.** Accelerate core applications with a balanced parallel architecture that delivers infinitely scalable performance and capacity.
- 3. Intelligent data management.** Get data insights and mobility at scale to enable smarter decisions.
- 4. Storage footprints of any scale.** Storage can be easily grown as organizations increase their instruments, experiments, and number of staff.



Life Sciences Use Cases

Genomics

Labs and companies that have a few benchtop sequencers (such as a NextSeq) wanting to perform in-house analysis and store results. A minimum ActiveStor Ultra Edge install can support several sequencers depending on output and run frequency. The platform can be expanded if data and performance needs increase.

Cryo-EM

Labs and companies with a single microscope or those that outsource to a Cryo-EM vendor. An entry-level ActiveStor Ultra Edge can immediately support a single microscope and 2-3 GPU servers. Expanding with additional storage enclosures increases capacity and performance simultaneously, so as labs add microscopes and users, ActiveStor Ultra Edge scales with their needs.

Decentralized Instrumentation

Organizations with multiple instruments in different locations can use ActiveStor Ultra Edge adjacent to the instrumentation for temporary data storage or preprocessing. PanFS can be configured to transfer the data to a centralized location for long-term storage or analysis.

ActiveStor Ultra Edge Details

ActiveStor Ultra Edge is a 6-rack unit (U) storage appliance that is delivered ready to be installed in a standard server rack. Configuration is simple, and most users can be up and running in less than a day. A minimum Edge install requires only 6U and can be expanded in 2U increments as needed. Each expansion brings an immediate increase in performance and capacity, and data is automatically balanced. Users do not need to create new volumes or arrays, and the new capacity is instantly accessible. A minimum ActiveStor Ultra Edge install starts at 260TB and can scale to any capacity needed.

About Panasas

Panasas builds a portfolio of data solutions that deliver exceptional performance, unlimited scalability, and unparalleled reliability—all at the best total cost of ownership and lowest administrative overhead. The Panasas data engine accelerates AI and high-performance applications in manufacturing, life sciences, energy, media, financial services, and government. The company's flagship PanFS® data engine and ActiveStor® storage solutions uniquely combine extreme performance, scalability, and security with the reliability and simplicity of a self-managed, self-healing architecture. The Panasas data engine solves the world's most challenging problems: curing diseases, designing the next jetliner, creating mind-blowing visual effects, and using AI to predict new possibilities.