

Do more with your data. Discover the data engine for life sciences.

The life sciences industry is awash in a data deluge, and it shows no sign of slowing down. Forward-thinking organizations need healthy data ecosystems that enable them to extract the most value from that data.

That's where we come in.

With Panasas ActiveStor® appliances running the PanFS® data engine, you can consolidate your organization's IT with a simple, reliable, and versatile data storage solution that streamlines data management and drives innovation across your workflows.

Prepare your data infrastructure for the coming AI wave



The global Life Sciences AI Market size in 2021 was valued at **\$1.3 billion**. The projected value for 2030 is **\$6.7 billion**, a compound annual growth rate (CAGR) of **20%**.¹



59% of life sciences leaders reported that COVID has accelerated their organizations' approach to deploying AI.²

Challenge

Artificial intelligence (AI) and machine learning (ML) are set to transform nearly every aspect of life sciences – from R&D, to clinical trials and diagnostics, to supply chain and regulatory review processes. As these technologies evolve from “nice to have” to “must have,” organizations must ensure that their data infrastructure can support AI/ML initiatives.

“My team is already struggling to effectively leverage the huge volumes of unstructured genomics data that we have, and our data center is groaning under the pressure. Effective AI integration across our organization feels unreachable.”

Solution

Whether your training datasets are large files, small files, or a mix of the two, **Panasas seamlessly adapts and scales to your needs.**

Our all-flash, hybrid, and high-capacity storage platforms will not only accelerate your current workflows, but also set you up for successful AI deployment.



Ready your storage for critical lab upgrades and ever-increasing data volumes

Challenge

When a team upgrades the detectors on their microscopes, those new cameras can easily double their data collection throughput. If their data storage can't keep up with the increased volume, this poses huge problems.

“Now that we've doubled all the throughput, is the storage layer fast enough, since we've doubled all the bandwidth needs as well? Do we have enough storage if we now have twice as much data filling it?”



The global Life Sciences and Lab Equipment Market size is estimated to reach **\$49.6 billion** by 2026.³



Healthcare and life sciences represent over **30%** of the world's total data volume, with a CAGR of nearly **36%**.⁴



Solution

Your data generation rates are not going to decrease. With infinite scalability, **Panasas allows you to cost-effectively grow the capacity of your data storage as your research expands.** The PanFS data engine's built-in Dynamic Data Acceleration automatically manages the movement of your files between SSD and HDD and maximizes the full potential of NVMe so that you don't have to.

Break down your data silos to extract maximum insights and unleash collaboration



Siloed research data that is not Findable, Accessible, Interoperable and Reusable costs the European economy at least **€10.2 billion** every year.⁵



Over the past decade, biopharmaceutical R&D partnerships have more than **doubled** in number.⁶

Challenge

There's a paradox in life sciences right now: While more data than ever is flowing through pipelines, the value of that data goes largely untapped. This is usually because the data ends up siloed in storage systems that can't communicate. In an industry where collaborative efforts drive breakthroughs, this presents a critical failing.

“Our analysts spend most of their time finding and acquiring data, and those are all one-off efforts. Our organization needs easier data access and simplified data sharing practices across our extended networks.”

Solution

Panasas **ActiveStor solutions break down data silos to transform how organizations manage, access, and share their data.** Consolidate your silos onto a single scalable, versatile, and simple storage solution that unlocks access to your datasets and promotes collaboration.



Eliminate your data storage headaches to reclaim your time, money, and energy.

Challenge

Open-source solutions require considerable staffing effort to set up and maintain. Employees with these skillsets are in demand and rare. Rather than supporting research efforts, IT teams at life sciences organizations are busy fighting storage fires.

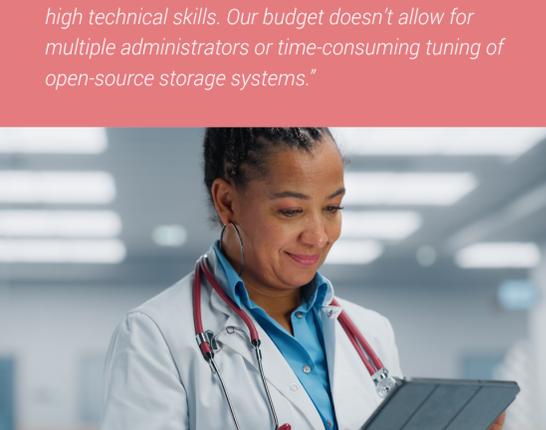
“We need a low-touch solution that doesn't require high technical skills. Our budget doesn't allow for multiple administrators or time-consuming tuning of open-source storage systems.”



Data workers worldwide spend a full **44%** of their workday on unsuccessful data activities.⁷



A single day of high-performance data storage downtime costs between **\$100,000 to \$1 million**.⁸



Solution

Panasas is a commercially supported storage appliance with decades of reliability engineering built into the file system – and we deliver this at the industry's lowest total cost of ownership. **Our platform's simplicity means that as many as 1,500 storage nodes can be managed by a part-time administrator.** As your system grows, you won't need any more staff to maintain it, so you can focus on science instead of data storage.

For 23 years, Panasas has designed storage solutions that deliver the extreme versatility, surprising simplicity, and unparalleled reliability that industry innovators need to move the world forward. That's how the PanFS data engine on ActiveStor platforms empowers you to be truly data driven. Discover what makes us different.

Download the Architectural Overview

For more information, visit **www.panasas.com/industries/life-sciences/**

Send an email to Adam Marko, Director of Life Sciences at **amarko@panasas.com.**

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²PwC. “Health industry AI efforts get a boost from the COVID-19 pandemic.” <https://www.pwc.com/us/en/tech-effect/ai-analytics/ai-predictions/health-industries.html>
³IndustryARC. “Life Sciences & Lab Equipment Market – Forecast (2022 – 2027).” <https://www.industryarc.com/Report/18892/life-sciences-and-lab-equipment-market>
⁴RBC Capital Markets. “The Healthcare Data Explosion.” https://www.rbc.com/en/gib/healthcare/episode/the_healthcare_data_explosion
⁵European Commission. “Cost of Not Having FAIR Research Data: Cost-Benefit Analysis for FAIR Research Data.” <http://publications.europa.eu/resource/cellar/d375368c-1a0a-11e9-9d04-01aa75ed71a1.0001.01/DOC.1>
⁶Deloitte. “How biopharmaceutical collaborations are fueling biomedical innovation.” <https://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/how-biopharma-collaborations-are-fueling-biomedical-innovation.html>
⁷IDC (commissioned by Alteryx). “State of Data Science and Analytics.” <https://www.alteryx.com/resources/report/idc-state-of-data-science-and-analytics>
⁸Hyperion Research (commissioned by Panasas). “New Study Details Importance of TCO for HPC Storage Buyers.” <https://www.panasas.com/resources/hyperion-research-new-study-details-importance-of-tco-for-hpc-storage-buyers/>