

# Education and Research Solutions Brief

## Data Integrity, Performance, Flexibility, and Lower Total Cost of Storage

Whether a university department or a large research lab, higher education and research institutions need to provide an IT infrastructure that will allow users to store, retrieve, and analyze data generated by their user groups whether on campus, around the world, or from outer space.



### Enter: Nexenta

Nexenta software-only products solve accessibility, storage performance, and data management bottlenecks and do so cost effectively. Nexenta provides a cost optimized, hardware independent storage platform to safely keep data and make it accessible from anywhere. It delivers superior performance running on industry standard x86 reference architectures from leading hardware vendors such as Dell, HP, SuperMicro, Cisco, Quanta, and others.

### With Nexenta, Research Institutes can meet higher levels of:

**Data Integrity:** the large, complex, and sometimes sensitive data sets at higher education and research institutions require the utmost in data reliability. Using the proven ZFS file system, NexentaStor provides unparalleled levels of reliability against data corruption and bit rot which has become a growing issue as the amount of data has exploded; and ZFS copy-on-write delivers 100% data integrity.

**Performance:** User groups at these institutions put high demands on their data. High levels of memory caching in its ZFS technology allow NexentaStor to deliver superior I/O for the fastest access to content. Inline data reduction also helps it deliver superior performance.

**Flexibility:** higher education and research data volume and complexity change frequently. As a software only product supported across a wide range of hardware choices, organizations are able to make the most effective storage hardware decisions independent from concerns about over/under-utilization or interoperability, thus allowing a lower cost solution.

**Total Cost of Storage:** Cost has become a significant concern as the amount of data storage is growing faster than IT budgets. Nexenta comes to the rescue with features such as inline data reduction which uses compression and dedup to shrink the storage footprint by up to 70%, ultimately delivering a lower hardware cost. Flexibility to utilize commodity server and JBOD on the underlying platform also helps to reduce the hardware cost. Plus the fact that you get high performing I/O without the overuse of SSDs, means delivering better performance at a lower cost.

### In summary: Why Choose Nexenta?

- Total Flexibility on hardware choice
- Lowest total cost for storage
- Highest levels of data integrity
- Improved data performance

Revolutionize your data storage.

### Choose Nexenta Software-Defined Storage

Request a proof-of-concept at  
[www.nexenta.com](http://www.nexenta.com)

Visit us online at [nexenta.com](http://nexenta.com)

# Higher Education and Research Solutions

## Solution

## Benefits

### NexentaStor

Unifies storage management for Block & File data  
100% end-to-end data integrity with triple parity RAID Inline  
data reduction for most efficient platform  
Scale-up to PBs

### NexentaEdge

Next generation unified management for Object, File &  
Block Optimized for cloud architectures like OpenStack  
Most efficient, most secure, best performing Object storage  
Best platform for graphical, video, and unstructured data

Comments from some  
leading Universities:

“The economic benefits of going with Nexenta jumped off the page following our initial calculations. Our decision to go with Nexenta will save the university around C\$9 million over five years. EMC and NetApp were more than 3x the cost of Nexenta and yet the functionality was basically the same.”

“Nexenta and the hardware system have worked wonderfully in concert to deliver consistent service.”

“With IT infrastructure, the main thing is you don't want to have anything 'brought to your attention' and since we installed Nexenta, there have been no trouble tickets and no reports of performance problems. It's performing absolutely magnificently.”



## These customers chose Nexenta



EPSRC



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University of Sussex



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