# NexentaStor and Unstructured Data

Unstructured data, such as files and images, are traditionally the majority of an enterprise's storage; they typically occupy more than 70% of storage within an enterprise. Unstructured data is also growing rapidly; according to ESG's 2006 study, unstructured data is predicted to grow at a CAGR of 96% over the next 5 years and will reach 26,000 PB by 2011! Such a rapid growth in unstructured data and the sheer mass of it poses several challenges to any enterprise – including rising storage infrastructure costs, complexity in managing data and in finding key data when needed. NexentaStor provides an ideal storage infrastructure that scales 'infinitely' to match rapidly growing enterprise storage needs, provides a low-cost option for storage while providing for all enterprise needs such as data protection and simple management including integrated search.

## Customer Challenges

As unstructured data grows rapidly, enterprises are storing it for longer periods of time thereby requiring the storage infrastructure to scale, manage and guarantee the protection of such data over its lifecycle. The phenomenon of large masses of unstructured data growing rapidly poses several challenges to an enterprise, the key ones being:

- Inability to scale with rapidly growing enterprise demands – performance and storage

- High infrastructure costs for extended periods of time owing to increased storage requirements, lengthy (infinite) retention periods and cost of management

- Difficulty in finding and retrieving key information within acceptable durations of time

- Increase in backup windows on primary storage systems due to increasing amounts of stale data on primary storage and inability to move data to archival tiers

An enterprise that does not have a solution that addresses these complexities is prone to rapidly rising storage and management costs, and runs the risk of having low productivity systems that are unable to ensure a low-cost, highly scalable and easy to manage approach to storing an enterprise's unstructured data.

## What is the Solution?

The NexentaStor platform provides the industry's first and only fully open-source based enterprise class system. It is at least 30% less expensive than a comparable enterprise

## NexentaStor™ Benefits

- Lowest-cost, open source-based, enterprise class storage system

- Inherent virtualization improves performance via **IO pooling** and reduces costs and management effort via **thin provisioning**

- Fast, online storage with **search** capabilities

- Easy integration with ISV applications via an API allowing C, C++, Ruby, Perl, Python, and other bindings.

- Multi-level data protection for maximum data integrity and longevity. Superior check-sum capabilities plus flexible block and file level backups
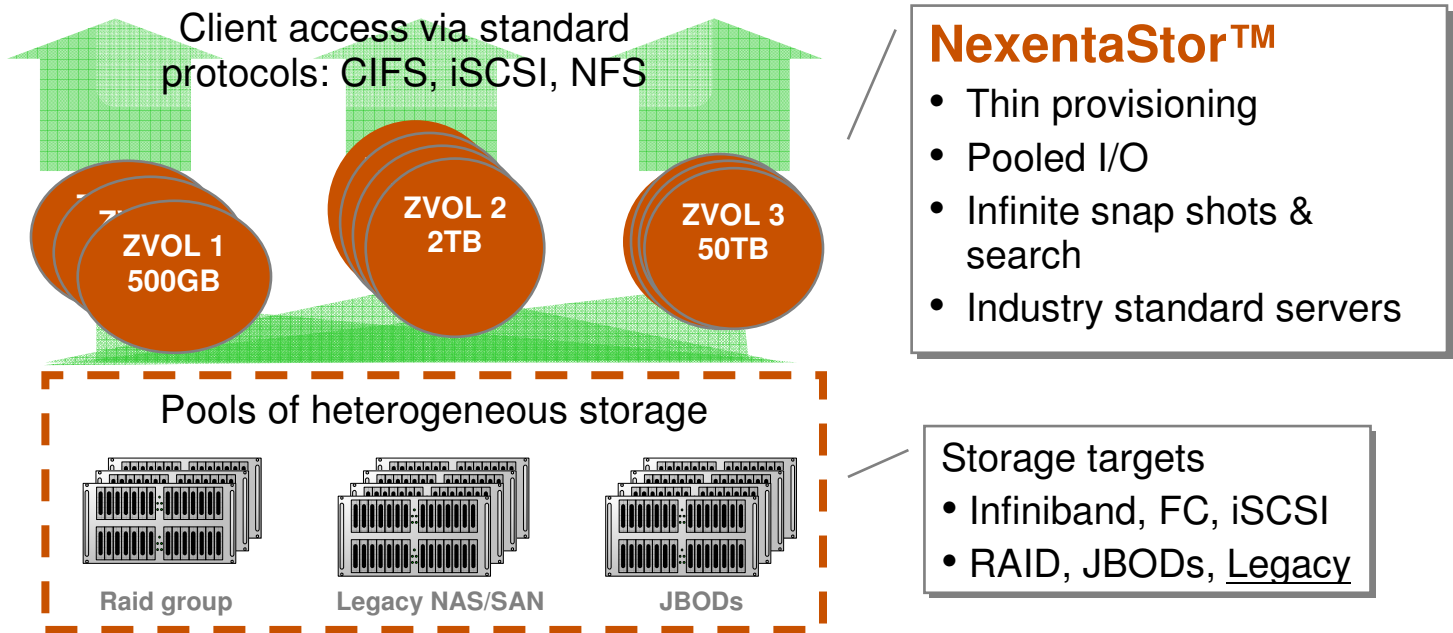
class storage system while providing the same or better benefits; and these economic benefits expand considerably over time with customers experiencing Total Cost of Ownership savings in excess of 50% versus legacy solutions. The underlying technologies, ZFS and OpenSolaris, provide the basis for very high scalability required for growing enterprises that do not want to worry about the costs and pains involved in adding storage or storage systems to their data centers.

OpenStorage technologies ensure that the solution is not proprietary with vendor dependencies which hinder easy and low-cost usability over lengthy periods of time. It also obviates the unnecessary vendor mark-ups for standard features. Further, ZFS offers massively scalable storage environments with virtually unlimited number of snapshots thus providing free versioning and high granularity of data protection.

NexentaStor also offers built-in replication for disaster recovery purposes and encryption for advanced data security and further cost reduction.

These capabilities, optionally combined with the industry's leading ISV solutions for file and image archival, provide a complete set of capabilities to set policies on unstructured data and thus manage it in a structured manner, including the ability to search efficiently.

NexentaStor works seamlessly in heterogeneous environments to provide a low-cost, enterprise class, open source-based, inherently virtualized storage solution necessary to meet the demands of the fast growing storage needs of today's enterprises.



**NexentaStor abstracts the underlying storage, creating ZVOLs that are exposed to clients via standard protocols. These ZVOLs can be managed via infinite snap shots and block level replication with the assistance of integrated search. No special client software is required. The result is a breakthrough is ease of use, price / performance, and price / capacity.**

## About Nexenta

Founded in 2005 and privately held, Nexenta Systems, Inc., has developed NexentaStor™, the leading OpenStorage enterprise class storage solution and sponsors NexentaCore, an operating system that combines the high performance and reliability of OpenSolaris with the ease of use and breadth of applications of Linux. Both solutions leverage the revolutionary file system ZFS. More information about Nexenta Systems, Inc., and about Certified partners that provide hardware, software and service solutions based on NexentaStor can be found at www.nexenta.com. NexentaStor is available as a *free* Developer Edition, as well as in Basic and Enterprise versions.