Scalable and flexible unified block & file storage



Pre-tested, certified, and pre-loaded: NexentaStor block/file storage on proven Lenovo systems

## Scale Your Storage

As data growth continues to outpace the growth of IT budgets, you need a brand new storage approach. The Lenovo Storage DX8200N powered by NexentaStor appliance allows you to accelerate and simplify unified file and block storage deployments. At the same time, this pre-validated turnkey solution provides easy scalability and simplified management at a fraction of the cost of legacy systems—without trade-offs in availability, reliability or functionality. Lenovo's global leadership and innovation in servers includes industry-leading reliability and world-class performance for business-critical applications and cloud deployments. You can directly obtain a single point of contact for 24/7 technical assistance from Lenovo's support organization, which is rated #1 for overall x86 server customer satisfaction.

The Lenovo Storage DX8200N powered by NexentaStor solution is part of the Lenovo StorSelect Software Defined Storage (SDS) program, which provides quality, engineering expertise, and Lenovo's worldwide global services. You can quickly and

confidently deploy new storage technologies, using pre-loaded appliances with software from best-of-breed Independent Software Vendors (ISVs) on proven Lenovo systems. The StorSelect solutions enable easy expansion for scalable deployments, as well as integration with existing storage infrastructure, so that you can grow your SDS deployment on your own terms.

## DX8200N powered by NexentaStor

The Lenovo Storage DX8200N powered by NexentaStor appliance is part of the award-winning Lenovo portfolio of systems. This versatile powerhouse incorporates industry-leading reliability, security, energy efficiency and world-class performance for business-critical applications and cloud deployments. Lenovo servers ranked #1 in reliability of all x86 servers for the third year in a row, and #1 in overall customer satisfaction for 2014 and 2015.

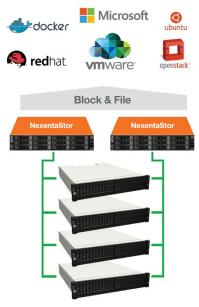
Lenovo XClarity provides resource management, including automated discovery, inventory tracking, real-time monitoring, configuration, fault detection, and alert handling. For easy network expansion and flexibility, the onboard Ethernet solution provides two standard embedded Gigabit Ethernet (GbE) ports and two 10GbE ports without occupying PCle slots. The appliance also incorporates smart-energy features for data center savings, including 80 PLUS® Titanium power supplies for up to 96 percent efficiency and TruDDR4 Memory that uses 45 percent less energy than DDR3 memory.





Lenovo systems accelerate performance across virtualized, transactional databases, high performance computing, and high frequency trading applications. Combined with the powerful Intel® Xeon® processor E5-2600 v4 product family, the Lenovo system offers outstanding workload density, designed to lower the total cost of ownership (TCO) per virtual machine.

Use the flexible, high-capacity Lenovo JBODs to easily scale your storage capacity as needed. You can start with one enclosure and rapidly add up to seven more, directly connected, for up to 192 hot-swap SAS drives.



Software defined unified block-and-file storage system

# NexentaStor Unified File, Block Storage

NexentaStor unified block (Fibre Channel & iSCSI) and file (NFS & SMB) storage software delivers dramatically lower storage costs for cloud and enterprise workloads. It offers massive scalability, includes data management functionality, and supports inline data reduction for additional storage cost savings. NexentaStor incorporates security, manageability, availability, reliability, lower TCO, and scalability with the ability to run on all-flash, hybrid and spinning disk configurations to meet your workload needs.

Additionally, NexentaStor supports periodic asynchronous long distance replication for high availability. In hybrid configurations, NexentaStor leverages hybrid storage pools and value-added enhancements for enterprise-grade data integrity, scale, and flash-ready performance. The software uses write-intensive SSDs to reduce write latency, and read-intensive SSDs as a cache to reduce read latency and improve performance. The hybrid Flash system is designed to achieve the right balance of cost and performance for any given workload.

## **Enterprise Use Cases**

Data powers many of today's most innovative businesses, and the Lenovo DX8200N powered by NexentaStor provides an affordable, highly efficient and durable storage platform to meet the massive data growth.

Target use cases for the Lenovo Storage DX8200N powered by NexentaStor solution include:

- Unified File (NFS and SMB) and Block (Fibre Channel and iSCSI) services
- · VMware cloud backend storage
- OpenStack and CloudStack backend storage
- Generic NAS file services and Home Directory storage
- · Near-line archive and large scale backup repositories

#### Why Lenovo

Lenovo is a \$46 billion global Fortune 500 company and a leader in providing innovative consumer, commercial, and enterprise technology. Lenovo enterprise systems deliver industry-leading performance, reliability, and security in virtualized and cloud environments for analytics, database, virtual desktop, infrastructure, and web workloads. Lenovo also offers simplified and extensible systems management tools so you can manage your infrastructure on your own terms. Consistently ranked #1 in reliability and customer satisfaction, the Lenovo enterprise server, storage, and networking portfolio provides the hardware for businesses that never stand still.



# Specifications

Storage Management Software	NexentaStor 4.0.4
Scale-up Storage	Two nodes, plus up to 8 JBODs
Supported Networking Protocols: Unified File and Block	10GbE NFSv3, NFSv4, 10GbE CIFS, SMB 2.1, 10GbE iSCSI, 8Gbps Fibre Channel, 16Gbps Fibre Channel
Data Availability and Integrity	Active/Active controllers, ZFS 256-bit block level checksums, RAID 10 and multi-parity software RAID (n+1, n+2, n+3), Asynchronous replication
Data Services and Optimization	Flash and HDD hybrid pools, ZFS Copy On Write, unlimited writable snapshots, thin provisioning, inline data compression, CLI & Web UI, SNMP & REST API
Systems Management	Lenovo XClarity Administrator with mobile option; Lenovo XClarity Pro software bundle; Lenovo XClarity Energy Manager; IMM2.1
Form Factor/Height (per node)	2U Rack
Processor (base)	Intel® Xeon® processor E5-2643 v4
Number of Processors (per node)	2
Cache (per node)	20MB
Memory (per node)	256GB (16x16GB)
Disk Bays (per node)	12 3.5-inch + 2 2.5-inch HDDs/SSDs
JBODs (per combined pair of nodes)	Up to 8 x Lenovo Storage D1212 or Lenovo Storage D1224 -up to 960TB raw capacity
Network Interface (per node)	2 1GbE + 2 10Gb (base), optional SFP+, Base-T, or FC
Power Supply (per node)	1/2 redundant 750W AC, 80 PLUS® Platinum
Hot-Swap Components (per node)	Power supplies, fan modules and HDDs/SSDs
Limited Warranty	3-year customer replaceable unit and onsite limited warranty, next business day 9x5; upgrades available
Support	Lenovo single point of contact for 24/7 assistance



#### For More Information

To learn more about the Lenovo Storage DX8200N powered by NexentaStor, contact your Lenovo representative or Business Partner or visit: lenovo.com/systems/storage

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