Storage Director Z Series

Leverage the versatility of ZFS to grow your organization's network storage with enterprise-class features at breakthrough savings



StorageDirector Z2 Foundation Nexenta-Certified SAN/NAS

NexentaStorTM Powered by

AT A GLANCE

- Next-generation ZFS File System
- Unified Storage for NFS, CiFS, iSCSI and Fiber Channel Networks
- Virtual Data Center Storage
- Data Deduplication & Native SSD
- Up to 192TB of Raw Storage Capacity

The Search for Cost-Efficient Network Storage

For IT managers and network administrators, keeping pace with today's storage needs can be a challenge. With traditional methods of file-based storage generally proprietary and cost-prohibitive, the need to archive business data and expand near-line storage – without sacrificing enterprise functionality or IT budget – exists throughout organizations of all sizes.

The answer? Eliminate closed-platform solutions in exchange for an open storage model that runs on standardized hardware.

Introducing the StorageDirector Z

Powered by NexentaStor^M – the OpenStorage SAN/NAS software platform developed by Nexenta – the StorageDirector Z is a series of managed appliances and SAN solutions designed for SMBs and departments within the enterprise.

Leverage the superior data integrity and versatility of the ZFS file system to deploy large volumes of data. The StorageDirector Z matches and exceeds enterprise-grade capabilities of proprietary legacy storage technologies at a fraction of the cost.



Open Storage Approach

Powered by NexentaStor[™], the StorageDirector Z takes an open storage approach that avoids proprietary vendor lock-in. Get state-of-the-art ZFS technologies with the usability of Linux on an industry-standard hardware platform.



Ready for Storage Virtualization

Managing a virtualized infrastructure? NexentaStor is the only storage virtualization solution to support all the major hypervisor platforms. Serve VMware vSphere, Citrix Xen or Microsoft Hyper-V virtual machine images over NFS or iSCSI network shares. View and manage your entire virtualized infrastructure, intelligently, with a simple point-and-click interface.



High-availability without the High Cost

A business continuity solution shouldn't consume an entire IT budget. IT departments of all sizes can now afford HA cluster SAN/NAS solution at a lower price-point than traditional storage solutions.



Scale as Your Needs Grow

With the power of zettabyte 128-bit technology, storage administrators can scale out the base configuration of the StorageDirector Z2 model by simply adding an additional disk shelf – up to 192 terabytes in all!



Product Overview

Discover how the StorageDirector Z – powered by NexentaStorTM – enables IT departments to radically reduce storage acquisition cost while increasing efficiency.

ZFS File System

128-bit File System – The most scalable & flexible as a 128-bit file system yet – compared with 32- or 64-bit file systems!

NexentaStor[™] OS – Built on the open source NexentaCore platform, NexentaStor OS provides a solid foundation based on the OpenSolaris kernel

Unlimited File Size – While most legacy solutions limit the size of the file-system, there are no such limitations with ZFS

Unlimited Storage Capacity – The StorageDirector Z eliminates storage limitations through disk and system expansion

Unified Network Protocol – Support for NAS (NFS, CIFS), SAN (block-level iSCSI & Fiber Channel), HTTP and FTP volumes, means flexible file-sharing over any network protocol!

Find-&-Correct Silent Data Corruption – Self-healing checksums and transactional copy-on-write I/O operations eliminate silent data corruption and 'write-holes'

Data Deduplication & Native Compression – ZFS-based in-line data deduplication and compression greatly reduces the use of primary storage on your StorageDirector.

Data Management & Recovery

Hybrid Storage Pools – Exploit I/O cache to accelerate read & write performance

Integrated Snapshot Search – Perform indexing & boolean searches from the file system to search for files within snapshots

Heterogeneous Block & File Replication – Synchronous or asynchronous replication for easy disaster recovery from local or remote systems

Block-Level Mirroring – Set-up remote backups and disaster recovery at offsite locations

NexentaStor[™] Management View – Centralized web-based tool allows a variety of functions to be performed from any location. Create, grow, delete, export & import storage volumes

NexentaStor[™] Management Console – A wizard tool with the ability to record & replay commands across all deployed instances of NexentaStor[™].

Storage & Service Reports – Easily generate automatic & periodic reports to manage the performance of the system and integrate it into SNMP based management solutions

Enterprise-Class Features



ZFS Unified Storage for NFS, CiFS, iSCSI & Fiber Channel



Deduplication & Compression



Unlimited Snapshots



Native SSD Performance

BENEFITS

- Reduced Deployment Time
- Cleaner Data Integrity
- HA Cluster Ready
- Hardware Virtualization Ready
- Fast Performance
- Simplified Management
- Best-in-Class Savings

User Scenarios



Application Server



Data Protection



Streaming Media



Cloud Storage



Primary & Tiered Storage

Utilization

Thin Provisioning - Let your hosts virtually see a larger storage pool than is physically available, to be filled later when you need it. No need to re-format the file system!

Inherent I/O Virtualization – Virtualize data in the file-system to allow thin provisioning via I/O pooling for hypervisor virtualization solutions to improve capacity utilization and performance

Software Plug-ins

High Availability Cluster – Single and dual active-active fail-over configuration options to increase availability by eliminating a single point of failure with a 2nd instance of NexentaStor

VM Data Center 3.0 Application – View and manage your entire virtualized VMware, Citrix Xen or Microsoft Hyper-V infrastructure from a simple point-and-click interface. Set-up backups, provision storage, set-up replication & retention policies, and perform common tasks, such as stopping & starting VMs or creating template-based clones.

Delorean Windows Back-up, Restore & Search Application – ZFS-powered back-up for Windows with VSS clients and Nexenta Delorean plug-in. Select files and folders to protect via a built-in File Explorer interface, with the option for replication in NexentaStor

Reliable Hardware with Fast Performance

****Memory** – Up to 96GB Maximum Memory **Processor** – Up to a Dual Six-Core Intel[®] Xeon[®] 5600 Series Processor

Motherboard – Intel® 5520 Chipset Motherboard Fast & Reliable SATA & SAS Hard Drives **6 GB/s SAS + SATA Network Connectivity **Up to 6x Gigabit Ethernet with Optional Networking LSI 8-Port SAS HBA Controller Redundant AC Power Supply

**Hardware specification varies by system



NexentaStor™ provides a complete Linux-based GUI for ZFS, eleminating the pain of command-line configuration!



The VM DataCenter plug-in provides integration with major virtualization platforms. Perform a variety of functions, such as create, delete, export or import storage volumes.



Pi	roduct Comparison			
	StorageDirector Z245 Appliance	StorageDirector Z250 Appliance	StorageDirector Z2 Foundation SAN	StorageDirector Z2 HA Cluster SAN
Physical Specs	2U Form Factor	4U Form Factor	Single Head System	Dual Head System
Operating System	NexentaStor Enterprise Edition	NexentaStor Enterprise Edition	NexentaStor Enterprise Edition	NexentaStor Enterprise Edition
License Terms	Silver or Gold	Silver or Gold	Silver or Gold	Silver or Gold
Support Package	Pogo Complete Maintenance Plan	Pogo Complete Maintenance Plan	Pogo Complete Maintenance Plan	Pogo Complete Maintenance Plan
Onsite Assistance	Available	Available	Available	Available
HA Cluster Plug-in	N/A	N/A	N/A	Available
VM Datacenter Plug-in	Available	Available	Available	Available
Maximum Disk Drives	24x SAS or SATA Drive Bays	24x SAS or SATA Drive Bays	Disk Shelf (Additional Expansion Available)	Disk Shelf (Additional Expansion Available)
Storage Expansion	Up to 40TB	Up to 40TB	Up to 192TB	Up to 192TB
Processor	Up to a Dual Six-Core Intel Xeon 5600 with Hyper-Threading	Up to a Dual Six-Core Intel Xeon 5600 with Hyper-Threading	Up to a Dual Six-Core Intel Xeon 5600 with Hyper-Threading	Up to a Dual Six-Core Intel Xeon 5600 with Hyper-Threading
Memory Slots	12x DDR3 Memory Slots	18x DDR3 Memory Slots	12x DDR3 Memory Slots	12x DDR3 Memory Slots
Maximum Memory	Up to 48GB Memory Maximum	Up to 72GB Memory Maximum	Up to 96GB Memory Maximum	Up to 96GB Memory Maximum
SAS + SATA Connectivity	3 GB/s SATA + SAS	3 GB/s SATA + SAS	6 GB/s SATA + SAS	6 GB/s SATA + SAS
Integrated Networking	(2) Gigabit Ethernet & LSI 8-Port SAS 2.0 HBA	(2) Gigabit Ethernet & LSI 8-Port SAS 2.0 HBA	(6) Gigabit Ethernet & LSI 8-Port SAS 2.0 HBA	(6) Gigabit Ethernet & LSI 8-Port SAS 2.0 HBA
Multipath O/I	N/A	N/A	Available	Available
Workload	 Application Server Hosted Services Stream Media File Server Archive Data Offsite Backup 	• Application or File Server • Hosted Services • Stream Media • Archive Data • Offsite Backup	Storage Tiering Cloud Storage Storage Virtualization Disaster Recovery	 Primary Storage Storage Tiering High Availability Workloads (e.g. Application Server, Cloud Storage, Storage Virtualization, etc.) Disaster Recovery



Pogo Linux helps organizations of all sizes reduce storage cost while increasing efficiency. Learn more about our line of network storage solutions at www.pogolinux.com

Additional Resources www.pogolinux.com/nexenta www.nexenta.com

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