



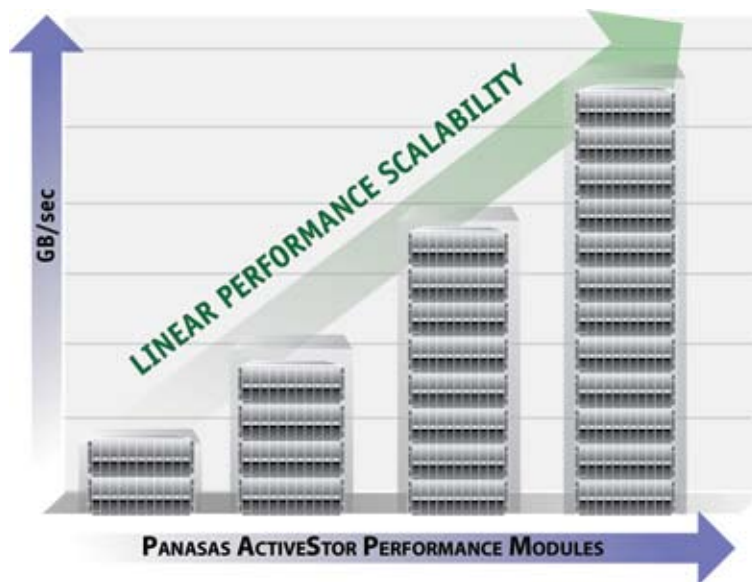
EXTRAORDINARY STORAGE FOR EXTRAORDINARY INNOVATION



INNOVATE
FASTER
BETTER
AT LOWER COST

How Fast Do You Want To Go?

Panasas is the leading provider of ultra high-performance storage for the world's most performance-intensive applications. Customers rely on Panasas storage systems to significantly accelerate their applications' throughput and to ultimately accelerate time-to-results. Industry leaders worldwide are using Panasas ActiveStor storage to deliver unprecedented breakthroughs in energy exploration, financial and portfolio analysis, climate modeling, manufacturing design, computational fluid dynamics and physics, digital animation, genetic research, and other applications.



“Today, we achieved 30GB/sec bandwidth performance in a production environment with the Panasas ActiveStor Parallel Clustered Storage. The Panasas scalable architecture gives us the flexibility to gain more performance by growing the size of the storage system in the future.”

James Nunez
Los Alamos National Laboratories

Unmatched Performance, Scalability, and Manageability

The Panasas ActiveStor Family is the most comprehensive and scalable family of ultra-high-performance storage in the world. Every ActiveStor platform is based on the Panasas ActiveScale File System—a parallel, global file system architecture providing unmatched performance, scalability, and manageability by enabling multiple, parallel data paths between compute nodes and ActiveStor storage, thereby eliminating the inherent speed and capacity bottlenecks that compromise other solutions.

From the entry-level 7 Series to the 8 Series, featuring superior single client and aggregate bandwidth performance, to the innovative, industry-leading 9-Series, featuring new Solid State technology combined with rotational disks providing exceptional performance in terms of IOPS and bandwidth throughput in a single virtual storage image, all ActiveStor products provide:

- peak performance by eliminating single lane data traffic bottlenecks

- pure linear scalability, without performance degradation
- ease-of-management with ActiveStor's global namespace technology

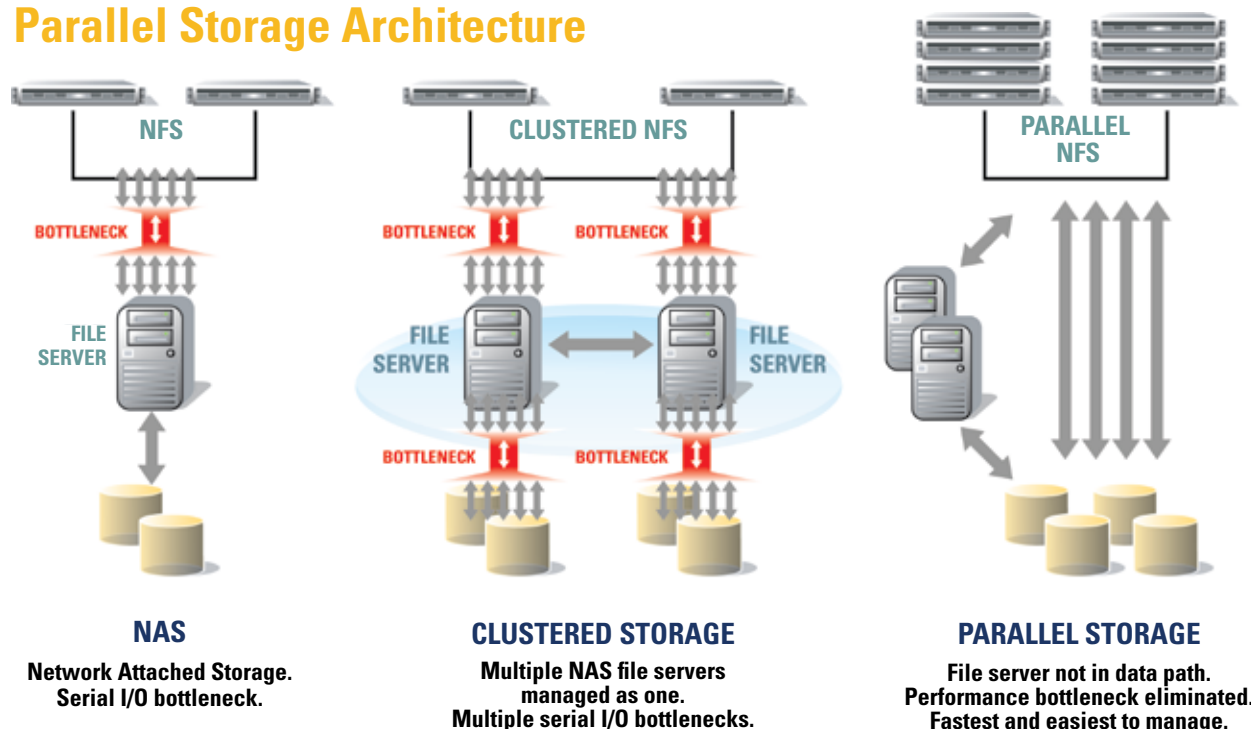
Linear Bandwidth Performance Scalability

Panasas ActiveStor systems are comprised of individual performance blades, which aggregate performance in a linearly-scalable system. This architecture provides distributed and balanced data path I/O eliminating performance bottlenecks.

Panasas ActiveStor Performance Modules

The Panasas ActiveScale File System provides a scalable architecture capable of achieving performance in the 100's of GB/sec by simply adding as many individual Performance Modules, or racks, to achieve aggregate performance. All aggregated Performance Modules are presented as a single system featuring a global name space providing unified management. The Panasas ActiveStor 7, 8 and 9 Series Performance Module building blocks provides three options to meet a wide range of application requirements.

Removing the Performance Bottleneck with Parallel Storage Architecture



Panasas ActiveStor Performance Module Specifications

PERFORMANCE & CAPACITY						
	7 Series		8 Series		9 Series	
	Single Performance Module	Aggregate Performance and Capacity per Rack	Single Performance Module	Aggregate Performance and Capacity per Rack	Single Performance Module	Aggregate Performance and Capacity per Rack
MB/sec	Up to 350MB/sec	Up to 3.5GB/sec	Up to 600MB/sec	Up to 6.0GB/sec	Up to 600MB/sec	Up to 6.0GB/sec
IOPS	Up to 12K	Up to 120K	Up to 12K	Up to 120K	Up to 21K	Up to 210K
Raw Storage Capacity	20TB	200TB	16TB - 22TB	160TB - 220TB	4TB - 16TB	40TB - 160TB
Storage Cache Capacity	5GB	50GB	16GB - 44GB	160GB - 440GB	32GB - 44GB	320GB - 440GB
Average Response Time	7 - 12 msec	7 - 12 msec	5 - 9 msec	5 - 9 msec	0.5 - 4 msec	0.5 - 4 msec
CONNECTIVITY, DATA MANAGEMENT & HIGH AVAILABILITY						
Single Network Connectivity Switch	1 Gbe x 4		1 Gbe x 4 10 Gbe x 1 (Copper or Optical)		1 Gbe x 4 10 Gbe x 1 (Copper or Optical)	
2nd Network Connectivity Switch	Optional		Optional		Optional	
Infiniband Option	N/A		Yes		Yes	
ActiveImage Volume Snap Shot	Optional		Included		Included	
ActiveStor High Availability Volume and Network Failover Software License	Optional		Included		Included	

* Specifications subject to change without notification

** Actual performance will vary depending upon client work load, network and system configuration

*** Contact Panasas or an Authorized Partner for details

Hot Swap Blade Architecture



SPECIFICATIONS

Shelf Power Specifications

- **Power Rating**
 - Output rating 950W
 - Input power rating 1200W
- **AC Power**
 - Typical operating current 4.4A @208VAC
 - Maximum in rush current 30A
 - Maximum current 7A @208VAC
- **Thermal Rating**
 - 4000 BTU/max

Shelf Environmental

- **Ambient Temperature**
 - Operating temperature +10C to +35C
 - Non-operating temperature -20C to 70C
- **Relative Humidity**
 - Operating relative humidity 10% to 90%
 - Non-operating relative humidity 5% to 95%
- **Altitude**
 - 150m to 2440m

Shelf Physical Specification

- Height 17.78 cm/7 in/4U
- Width 48.26 cm/19 in
- Depth 66.04 cm/26 in
- Weight 150lbs

Drive Specifications

- **7 & 8 Series: 7200 RPM SATA Disks**
- **9 Series: Solid State + 7200 RPM SATA Disks**

Rack System Specifications

- **Configuration**
 - Supports up to 10 Panasas shelves
 - Can be configured from 1 shelf to 10 shelves
- **Power Distribution Units**
 - 4 Pre-wired PDU units 208/240 volts
 - Support redundant power grids
- **Rack Physical**
 - 42U high
 - 1800 lbs



6520 Kaiser Drive Fremont, California 94555 Phone: 1-888-PANASAS Fax: 510-608-4798 www.panasas.com
1-888-PANASAS (US & Canada) 00 (800) PANASAS2 (UK & France) 00 (800) 787-702 (Italy) +001 (510) 608-7790 (All Other Countries)

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