ANX 1500 NFS Throughput Acceleration Appliance

The Challenge

As data and user requests for that data continue to grow at an unrelenting pace, storage administrators feel the burdens of NAS that can't scale to the demands. Too frequently, NAS becomes the bottleneck limiting NFS throughput and delivering poor response times to users. And, time being money, these are expensive problems to have.

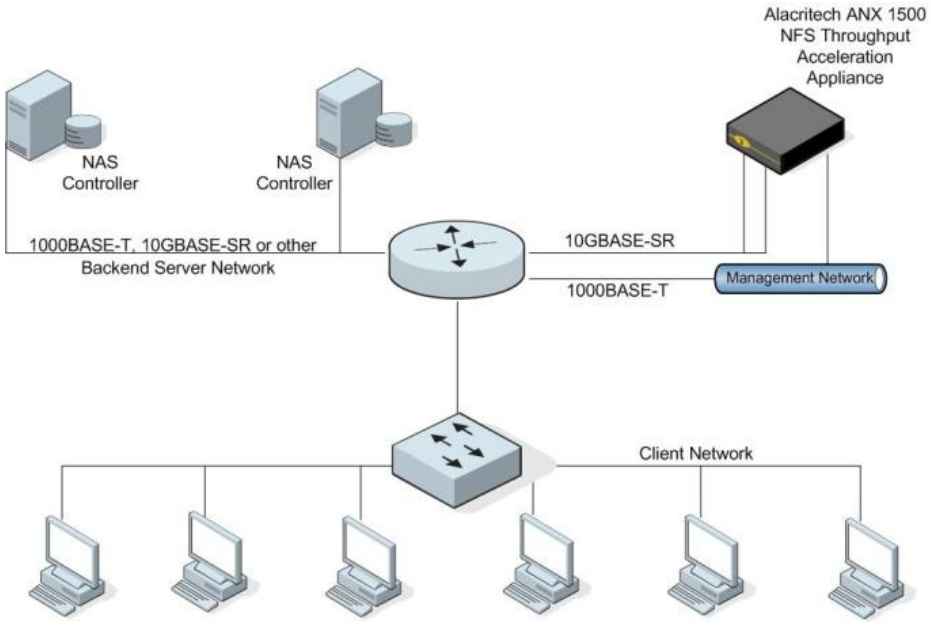
Additionally, tight budgets, fewer resources, and space and power constraints require IT managers to get more out of the NAS they already have.

The Solution
More data, delivered faster and cheaper with innovation.

The ANX 1500 NFS Throughput Acceleration Appliance offers a low-cost, easy-to-install, easy-to-use solution for IT managers who are searching for improved response times and higher aggregate data throughput from their existing NAS infrastructure.

With the support of standards like TCP/IP, NFS, and 10GbE, the ANX 1500 can be easily installed without adding additional hardware/software to existing clients or NAS controllers.

- Featuring 48GB of DRAM and up to 4TB of solid state drives, the ANX 1500 services most client NFS requests, while minimizing cache misses and relieving the overburdened NAS controller.
- The ANX 1500 uses optimized write-through cache to significantly accelerate NFS READ and metadata OPS and reduce the number of disk-drive IOPS required to deliver targeted response times.
- Delivering up to 120,000 SPECsfs®2008 OPS, the ANX 1500 allows customers to install less expensive high density SATA disks and still enjoy increased overall OPS and reduced response times.
- This equates to adding 120,000 IOPS to the NAS infrastructure without the expensive capital costs, rack-space consumption, power drain, increased cooling, and complex systems management normally associated with augmenting NAS infrastructure.



Performance and Acceleration

The ANX 1500's high performance is attributed to its tightly integrated NFS Bridge™ software powered by 8 Intel® Xeon® processor cores, Alacritech's fifth-generation 10GbE dynamic TCP offload technology, and additional NFS acceleration enhancements. The ANX 1500 is designed to offload and accelerate thousands of connections generating massive throughput gains and improved response times over un-assisted conventional NAS. For example, the ANX 1500 can satisfy over 2 million NFS metadata OPS, compared to a scale-out NAS system containing a 9-node cluster, topping out at less than 500,000 OPS. The ANX 1500 optimizes the delivery of NAS data for a wide variety of applications where users are frequently accessing the same data. Examples of application environments include: EDA, Genomic Research, Software Development, Seismic Interpretation, Financial Modeling, Animation, and Post Production.

Highly Available Failover Cluster

The ANX 1500 can be configured in a failover cluster, one active, and one passive node. In the unlikely event of a failure, the passive node seamlessly becomes active and assumes the responsibility for responding to client requests.

Easy to Use

System admins can easily access the ANX 1500's embedded web-based management interface, CacheView, from across the network to monitor system performance, modify system parameters, or update system software. And, with built-in context-sensitive help, novice users can easily understand all of CacheView's system settings without having to refer to the manual.

Supporting up to three severity levels of email alerts, entry-level staff can be notified of non-critical warning conditions, while more crucial issues are expedited to decision makers. Also, with Phone Home Support, the Alacritech Support Center can be automatically notified of critical situations.

Feature	ANX 1500 (10 SSDs)	ANX 1500 (20 SSDs)
Processors	Dual Quad-Core Intel® Xeon® Processor 5500 Series with Clock Speed 2.2 GHz	
Memory	48GB	
Hard Disk Drives	Dual 500GB Mirrored System Drives	
Number of 200GB SSDs	10	20
Total SSD Storage	2TB	4TB
Storage Connectivity	Dual 10GBASE-SR for NFS Data	
Management Connectivity	Dual1000BASE-T (also supports 10BASE-T & 100BASE-TX)	
Heartbeat Connectivity	1000BASE-T	
Link Aggregation	LACP (IEEE 802.3 1AX), Static (Cisco® EtherChannel®) or Failover	
Power Supplies	Dual Auto-Switching	
Supported Standards	TCP/IP (IPv4), NFS V3, DHCP, DNS and NIS Clients, and IPMI	

Environmental Specifications*

- Operating temperature: 50°F to 93.2°F (10°C to 34°C)
- Non-operating temperature: -40° F to 158°F (-40°C to 70°C)
- Operating relative humidity: 20% to 80% non-condensing
- Non-operating relative humidity: 5% to 95% non-condensing
- Acoustic level: <7.2 bels (L_{wad} at 25°C)

Electrical Specifications

- Input voltage: 100-264 VAC
- Input frequency: 47-63Hz
- Power consumption: <400W

Dimensions and Weight

- Width of front panel: 19.0 in (48.3 cm)
- Width of back panel: 17.25 in (43.8 cm)
- Depth(with front bezel and no keys): 30.5 in (77.5 cm)
- Height: 3.5 in (8.9 cm)
- Weight: 55 pounds (24.9475 kg)

Certifications

FCC Part 15 Class A, CE Mark applicable to Directive 89/336/EEC, EN55022 Class A (CISPR 22), EN55024 and EN60950.

* All specifications subject to change without notice.

Alacritech provides the simplest and fastest storage network acceleration solutions that dramatically improve the performance of the existing enterprise network storage infrastructure. Learn more at www.alacritech.com.