

# PCQuest NAS Shootout

## 'How to Choose and Benchmark a NAS'

February 2007  
(Extract)



### Review

## Snap Server 520

Price: Rs 2,85,000 (3 yrs warranty on hardware, 90-day software support) Contact: Adaptec India, Bangalore, Tel: 41339000

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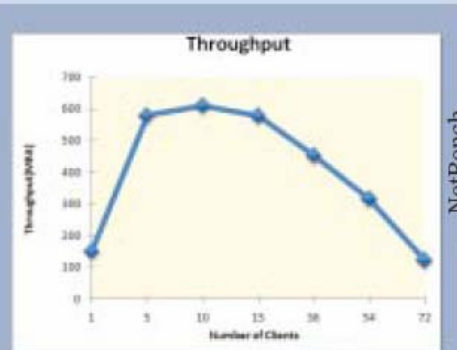
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This NAS was the best performer of the lot. The device runs Linux based Guardian OS, and has a simple and easy to understand Web interface for management. It also has a LCD display. Interestingly, its OS takes 10 GB space on every hard disk, which ensures that the server will keep running even if two or even three of the hard drives fail. It ships with 4 x 250 GB 7200 RPM hot-swappable SATA drives and 512 MB RAM, which can even be upgraded to a good 4 GB. The device also ships with a Manager application, which is useful only if you're running multiple Snap Servers in your data center.

The SnapServer can also work as an FTP or a Web server, and supports CIFS, SMB, NFS and AppleTalk file systems. It also has plenty of monitoring capabilities from regular system monitoring, users monitoring, open files monitoring to iSCSI device monitoring. The box shipped to us with CA Antivirus pre-installed, and even BakBone NetVault software for taking backups to tape drives. The box also supports taking snapshots and there's even an option to create a single image of its configuration and all its data. This can be great for DR purposes, as you can simply copy the image to another storage device or tape drive. After configuring RAID 5, the available storage capacity on the server comes down to 691 GB.

On the performance front, like we said, it gave excellent results. It scored a whopping peak

throughput of 608 Mbps in NetBench, and that too with 15 clients (whereas others peaked out at 5 clients). Even beyond 15 clients, its throughput remained higher than the other NAS boxes. In Iometer, the I/Os per second it recorded for both 64 K and 128 K request sizes were the highest in sequential reading and writing of data. In transferring 100 GB of data, it only took 73, which was the fastest among all NAS boxes reviewed. Likewise, transferring a compressed ISO image of the same 100 GB of data was also the fastest at 44 minutes.



I/O meter Parameter	Transfer request size	
	64K	128K
100 Read + 100% Random	92	48
100 write + 100 % Random	32	30
100 Read + 100% Sequential	1763	800
100 Write + 100% Sequential	1508	643

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