TANEJA GROUP
TECHNOLOGY ANALYSTS

P R O D U C T P R O F I L E

Snap Server 550

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THE NET NET

The Snap Server product line has long been one of the most heralded workhorses of cost-effective NAS. With the most recent release of the Snap Server 550 from Adaptec, we believe that the company is moving the Snap line into a critical transition point in price/performance and features. By leveraging the 64 bit AMD chip architecture with both a SAS/SATA and NAS/iSCSI option in a 1U form factor, this is a NAS box that can hold its own against most higher priced competition. When combined with the company's recent investments in software enhancements, including remote client CDP support, we believe that the Snap Server 500 series is well positioned for serious consideration in a wide range of mid-range workloads and distributed enterprise deployments. After all these years, the fact remains that Snap Server is definitely in this game to win.

A New Wave of NAS

There used to be an unspoken but unavoidable trade-off that customers faced when shopping for a NAS platform: Pay through the nose for great performance and functionality, or save money with a cost-effective NAS offering and accept lower performance with fewer features. If you were a NAS vendor, you knew your place in this simple dichotomy and you stuck to your knitting. However, we now see these historical price/performance and feature issues giving way to a new wave of competition. Specifically, we see a range of cost-effective unified NAS/iSCSI solutions beginning to mount an offensive in the mid-range. Today, this battleground is focused on the highly contentious SMB market, but the trajectory is clear: Scalable, high performance NAS/SAN functionality is increasingly available for unprecedented value.

The competitive issues are not merely that these cost-effective offerings are riding the tech curve to deliver higher performance at lower costs; they are also delivering bundled advanced software capabilities for replication, snapshots and data protection, as well as integrated iSCSI support for block data.

This explosion of choice is great news for customers. Of course, if you happen to be one of the heavyweight NAS providers that has built a reputation on expensive enterprise NAS, this is an early wake-up call. We believe there is a new wave of "killer NAS" on the horizon. High price is no longer a reliable arbiter of highest value in the mission critical NAS world for SMB customers.

A perfect example of this emerging NAS trend comes from the new Snap Server product line. In fact, the company's latest offering, the Snap Server 510, 520 and 550, are textbook examples of the value that cost-

effective appliances can bring to the mid-range market.

The Adaptec Snap Server 550

The new Snap Server 550 demonstrates just how much enterprise punch a mid-range storage offering can pack into a small form-factor. The 550 is a 2.4 GHz 64 bit AMD Operton based 1U appliance that supports hot-swappable SAS and SATA disk with redundant power supplies (an industry first in the 1U form-factor). The 550 ships with 1.2 TB (SAS) raw capacity, dual Gigabit Ethernet connectivity, and can support concurrent file and block storage in the same physical server through its built-in iSCSI target. When this SAS/SATA and file/block flexibility is combined with the offering's standard 1 GB memory, it means that SMB customers can run everything from file serving to database workloads on this converged platform (Adaptec reports 700 Mb/sec performance for the Snap Server 550).

Expansion capacity for the 550 is a noteworthy advance, as well. This platform can scale from its initial capacities to 26.4 TB (SAS) or 43.2 TB (SATA) through the SANbloc 2u/12 drive JBOD expansion array.

Pricing for the 550 is $9,995 for the 1.2 TB SAS configuration. Frankly, we find this to be an extremely attractive price for branded product in this performance and feature range. It is important to note that Snap Server has bundled several pieces of software functionality into this price, as well. The 550 ships with built-in support for iSCSI, NFS and CIFS, online capacity expansion, a workgroup version of Bakbone NetVault, and anti-virus software from CA eTrust. This should add up to an enticing bundle for the price, performance and feature expectations of a wide swath of the SMB market.

The 500 Series Family

We are focusing our discussion here on the 550 because we believe it represents the "tip of the spear" for where cost-effective NAS can go in the lower enterprise price-bands, but it is worth noting that the company is also offering two other models in the 500 series: The 520 with 1TB and 2TB (SATA) raw capacity configurations and the 510 with 640GB (SATA) raw capacity. Both utilize the AMD Opteron chip, albeit at lower GHz levels.

The 520 can be outfitted to pull double duty as a primary or secondary storage platform in departmental deployments, supporting scalability up to 26 TB (SATA recommended). The 510 is targeted at smaller secondary storage deployments with a 640 GB SATA capacity. Performance for both the 520 and 510 are extremely respectable for their class, clocking in at 555 Mb/sec and 525 Mb/sec, respectively (NetBench). As the company is proud to note, these are levels approximately 2x faster than the nearest same-class competitors, due in no small part to the lift provided by the AMD 64 bit architecture.

As with the 550, both the 520 and 510 come with the same bundled software functionality described above. Prices for these two models range from $3,595 to $6,395, depending on capacities and configurations (e.g. optional

redundant hot swappable power supplies, SCSI backup support.)

An Expanding Software Story

Changing price/performance expectations with the 550 is a great start, but Snap Server seems to understand that an expanded software strategy is needed to drive higher into enterprise environments, as well. Accordingly, along with the introduction of the 550 they are also announcing the availability of the new StorAssure Personal Edition software. This is a file-based Continuous Data Protection (CDP) solution aimed at Windows desktop and laptop clients for the distributed workforce. Deployed as a lightweight agent on each protected client, StorAssure enables a Snap Server to become a centralized CDP repository for all file-level data changes. In the event of an end-user data loss event, the administrator or user can recover the entire user data set or specific files from an online GUI.

Based on our own interactions with this product, it is very easy to deploy, completely wizard driven, and should be well received by IT teams looking for a quick and easy way to provide end-client protection where it was previously impossible. For companies already on the Snap platform and looking for a cost-effective way to extend disk-based data protection, this is particularly attractive. The kicker: Pricing is just $35 per client, and supports Windows XP SP2, Windows 2000 and Windows ME versions. Free 45 day trial versions are available for download at www.snapserver.com.

In addition to the StorAssure platform announcement, customers should note that disk-to-disk and disk-to-disk-to-tape support is delivered to the Snap platform through the partnership with Bakbone software and the company's NetVault product line. Because a workgroup version of this offering is included in every Snap 500 Series offering, we expect many customers will explore this software as their initial option for disk-based data protection on the Snap platform.

For replication, disaster recovery and remote management controls, the Snap line leverages their Snap EDR (Enterprise Data Replicator) software. This file-level control software requires at least two servers (a source and a target). Snap EDR can utilize policy controls for wide-area or local server-to-sever data movements. It supports heterogeneous environments (Snap, Windows, Linux, and Unix) and can scale to over 1,000 end clients. This architecture means that Snap customers can use Snap EDR for either one-to-one replication or as a remote distribution platform for file content.

Snap Positions for Key Trends

Beyond bringing a useful new breadth of functionality and power to the Snap Server family, the 500 series announcement is indicative of several overall trends in the mid-range NAS/iSCSI market in 2006-2007. We identify these trends below:

Trend: File/Block Flexibility. It is simply not enough to provide cost-effective high-powered mid-range NAS today. Customers are demanding the flexibility to deploy these mid-range solutions for mission critical block

storage (primarily for database and email environments.) We are in the early stages of a real unified storage (NAS/SAN) convergence, and the SMB will be a critical market. As such, by including an iSCSI target in the GuardianOS for the Snap Server line, the company is positioning the entire product family to take advantage of this trend. Additionally, by enabling hot swappable SAS/SATA disks, Snap Server can laser in on the right price/performance profile for a wide range of workloads, from database duty to online archival. Vendors that cannot meet this level of flexibility, especially for the increasingly demanding SMB market, will feel the pain in loss of market share.

Trend: Enable the Remote Office. Any historical mid-range NAS provider that does not seriously consider their product line's role in the remote office is going to be lost in the dust within 12 months. The speed with which we see customers aggressively deploying distributed computing solutions to consolidate and control remote office data is staggering (witness the growth in the WAFS, file management, remote replication, and remote backup markets for proof.) The role that a NAS provider *should* play in this trend is very strategic. Wrapping remote office software tools around a cost-effective distributed NAS platform is the key. We believe that the Snap Server team has had this very insight for several years. Their early investment in Snap EDR, the BakBone partnership, and the StorAssure CDP offering should pay off as SMB users seek out heterogeneous remote office and distributed workforce solutions over the coming quarters.

By contrast, vendors that choose to offer simple point NAS offerings for the remote office will soon find themselves displaced by more sophisticated offerings that "get" the criticality of the distributed enterprise.

Trend: Online Scalability. The last trend that we believe will separate the leaders from the followers in the SMB NAS market is the ability to *demonstrably* scale in a seamless and non-disruptive fashion. Whereas it was once possible for a NAS vendor to get away with capacity limitations for the smaller customer, it simply no longer suffices. We routinely see "small" deployments growing into very high growth, multi terabyte NAS and SAN production stores in just months. These scalability requirements are no less stringent in terms of uptime and end-client non-disruption than traditional high-end NAS. Again, the Snap Server team has answered this question satisfactorily with their inclusion of a easy-to-use capacity expansion tool for NAS (Instant Capacity Expansion "I.C.E." software) and the interchangeable JBOD building blocks of their SANbloc capacity expansion shelves (SAS or SATA).

In short, what all of these trends point to is a gradual closing of the gap between enterprise and SMB customer expectations with regard to storage technology. This is a real opportunity for vendors that have both the capabilities and technologies to bridge that gap and disrupt entrenched players. Based on what Snap Server is bringing out with the latest 500 series, especially the 550, the company is clearly in synch with this trend and making the right moves to stay ahead of

the competitive noise in the mid-range market.

Taneja Group Opinion

We believe that the Snap Server line is clearly moving into a critical juncture in 2006. As we have explored above, the once clear-cut NAS vs. SAN market is just beginning to transform into a "mix and match" unified storage market. Simultaneously, SMB and departmental NAS customers are demanding more software functionality, performance and scalability from their traditional vendors. Because of its longstanding market leadership, the Snap Server line is well positioned to take advantage of this evolution in the market. The work that has gone into the 550 in terms of performance gains, SAS/SATA flexibility, file/block convergence, and enterprise software bundling makes it stand-out versus the competitive landscape.

In fact, we believe there is a real opportunity available to the Snap Server line to "punch a hole" up into the lower reaches of the enterprise NAS market. The pricing vulnerability we see from the high-end NAS competitors is increasingly open to competitive moves from product families like Snap Server. Customers will give a hard look at a sub-$10,000 SAS-based NAS box with great performance and a scalability story.

Ultimately, the latest Snap Server 500 Series announcement demonstrates that this product line still deserves its reputation as a resilient, forward-looking technology platform. If the quality of execution, the range of features, and the price/performance equation continue on this path, Snap Server has a great 24 months ahead of it. Of course, the real winners will be Snap's customers who are getting a ton of enterprise value for a fraction of the cost. That's the secret to building the "Killer NAS" for the mid-range. It appears that the game is on!