NAS systems enable distributed networks

■ Affordable, local file serving answers the remote-office storage dilemma

By Dan Neel

N THE NEXT ROOM or in the next state, e-business networks are increasingly being distributed further and further afield. Helping to enable this IT expansion are improvements in NAS (network attached storage) systems, giving companies the tools to provide local file serving at almost any point on a network.

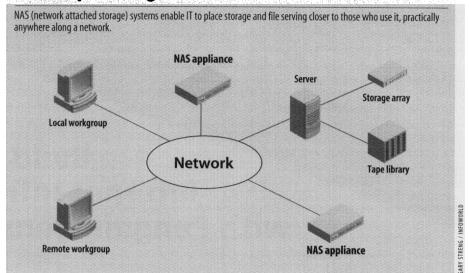
Additionally, recent NAS offerings from companies such as Network Appliance and Dell Computer now deliver high-end features such as snapshot and load balancing in systems priced for the midsize market. These new products offer the IT industry many enterprise-class NAS features, while saving money and remaining true to the traditional simplicity of NAS architecture.

Steve DuPlessie, senior analyst at Enterprise Storage Group, in Milford, Mass., agrees that a properly designed NAS solution is as intuitive a device to operate as they come.

"The reason NAS is getting the credit it deserves is it's really easy to use. It's not complicated; it's simple," DuPlessie said.

Intent on offering enterprise-class NAS features while staying fixed in the midmarket price range, Dell recently rolled out its PowerVault 735N, a 144GB NAS system capable of scaling to 1.44TB. Installed in approximately 15 minutes, the Wintel-based Power-Vault 735N offers support for Windows, Netware, Unix, Linux, and Macintosh clients, all

On the spot storage



for slightly less than \$10,000, according to Dan Blizinski, a NAS product manager at Round Rock, Texas-based Dell.

A dual-processor XP model of the Power-Vault 735N will be available when the 735 series begins shipping Feb. 16, Blizinski said.

"Features like snapshot, load balancing, and mirroring that we will bundle in [the PowerVault 735N] have typically been enterprise-class features," Blizinski said. "Features that are extra with [some NAS products] we want to bundle into the solution for an affordable system for our customers."

Likewise, Network Appliance recently unveiled three lower- and midrange NAS systems — the F85 Filer, the F820 Filer, and the F820c Filer — and a midrange caching system, the NetCache C3100.

Chris Bennett, the director of marketing at Sunnyvale, Calif.-based Network Appliance, said the company's latest NAS products also offer enterprise-class features such as snapshot and load balancing at the company's midrange price points.

"Our significantly expanding product offering spans the high end to the low end, and [the new NAS systems] are designed with remote offices in mind, priced at PC server prices, because you're not going to put an expensive [NAS system] out in a remote office," Bennett said.

The Network Appliance F85 Filer, which can also be installed in approximately 15 minutes, is scalable to 648GB of storage and has a list price of \$13,900. The F820 Filer scales to 3TB of storage and starts at \$70,000. The F820c offers 6TB of storage scalability for \$195,000. And the NetCache C3100, designed for enterprise-class content delivery with HTTP performance greater than 90Mbps, retails for \$40,000.

With the introduction of the new systems,

Network Appliance announced native support for Windows 2000 on its micro-kernel operating system, Data ONTAP 6.0, in addition to continued Windows NT, Unix, and Web support, officials said.

As an innovator of current NAS technology, Network Appliance officials believe all storage should work from the NAS model, a scenario in which stored data is distributed across a network, in locations closest to the primary users of that data.

With Network Appliance's Content Director and Content Reporter software, "customers can stage information at certain points in the network, so it's faster to download," Bennett said.

"Rather than keep all the data stored in a glass house, delivered through wide bandwidth, we are more Internet-centric in the sense that info and data is spread across a network rather than all put in Fort Knox," Bennett explained.

The opposite of this idea, SAN (storage area network) architectures, have become popular solutions for dealing with large volumes of locally used data. But SANs still require a considerable investment, are restricted by the distance limitations of interconnections such as Fibre Channel, and therefore may not be the best way to serve stored data over long distances such as to remote offices or workgroups.

NAS can provide faster local storage and file serving for large or small e-business environments at a fraction of the cost of a SAN, while operating over IP-standard networking protocols.

The NAS market is expected to reach over \$10 billion in end-use sales by 2004, according to a study by Cahners In-Stat Group, an industry research company in Scottsdale, Ariz.

E-BUSINESS SHORTS

IBM online marketplace package ships

IBM has announced the worldwide availability of its iSeries Connect software, which allows small and midsize companies to link their businesses to online market-places and partners. iSeries Connect is built on Sun's Java and XML and is designed to run on systems used for e-commerce, such as WebSphere from IBM and Domino from IBM subsidiary Lotus Development. The software, which works with IBM's eServer line of systems, offers connectivity and catalog tools, and allows users to add features to the software as they are needed. Customers using the software will be able to establish secure, direct connections with

their business partners or with online exchanges, according to an IBM release. Also included in the package is IBM's MQSeries middleware, which provides messaging features. iSeries Connect pricing starts at \$1,000, according to the company.

AbleSolutions, iCommunicate team

AbleSolutions has teamed up with iCommunicate on a Web-based customer support solution, the two companies announced. AbleCommerce, a division of Vancouver, Wash.-based AbleSolutions, plans to use the iCommunicate.NET customer assistance technology. iCommunicate's solution can be

integrated into an e-commerce business' system to provide proactive self-assistance functionality to its Web site. AbleCommerce became sold on the iCommunicate technology after integrating it into its own Web site, Vice President Keven Newling said, boosting the capability of AbleCommerce for tracking incidents, maintaining client histories, and centralizing its knowledge base as a customer resource.

Neon, Princeton in integration alliance

E-business integration provider Neon Systems has formed an alliance with Princeton Consulting, a Slough, Englandbased e-business integration provider serving the European market. The alliance provides for Sugar Land, Texas-based Neon to offer software solutions for business process automation, business-tobusiness integration, and enterprise application integration. Princeton will provide Internet strategy consulting, system integration services, and full operations outsourcing, the companies said in a statement. Neon expects the alliance to capitalize on Princeton's rapid time-to-market approach, said Neon President Steve Odom. Princeton meanwhile expects the alliance to help customers create a complete e-business system, from CRM (customer relationship management) to trading partner management, said Princeton Business Development Director Paul Lombardo.

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