

■ INFRASTRUCTURE

ENTERPRISE STORAGE SOFTWARE: CASE HISTORIES

Jump *Into the* Pool

The broad themes in storage management today for enterprise IT managers are pointing in the same direction. Companies are so saturated with storage they have been buying for the past several years, that the challenge now is to perform discovery about what storage is out there and how well it is being used. The shift away from direct-attached storage devices to network-attached and storage area networks continues. But the soft economy and brakes on IT spending increase pressure to do more with less and break the cycle of having to add administrative staff along with storage capacity. IT operations managers seek a global view of the storage complex across hardware types and the entire network if possible, into a “pool” of storage that enterprise IT seeks to manage from a common console or framework. Through this they hope to be able to manage complex storage networks at a lower cost.

“The vendors understand the user direction, and there is almost a unanimous approach to this problem by every vendor,” says Richard Lee, president of the Storage Consulting Group, Ridgewood, N.J. However, “It’s a big mess and there are no clear leaders.”

The advantage has shifted, in Lee’s opinion, to the newer players and startups. “They bring fresh ideas, a new approach, and are hardware and installed-base agnostic,” he says. “For years the hardware suppliers have tied customers into proprietary technology. People today are a lot smarter.”

One player representing the shift is Fujitsu Softek of Sunnyvale, Calif., formed in March 2001 with a mix of products that provided a foundation for a move into the storage management software market. The company has been developing and acquiring products to build out a storage management portfolio. The company announced Softek Storage Manager, a storage resource management product, in March 2002. Its acquisitions include the source code of SANsymphony from DataCore software and Vixel’s SAN management business, which included 29 developers. The firm’s TDMF product for transferring data, with mainframe roots and now open-system platform support, is popular with companies transitioning data from direct-attached to storage networks because it can operate on different manufacturers’ hardware.



“We spend a lot of time in a consultative sales cycle, advising on best practices and helping to organize the consolidation of storage,” says Steve F.X. Murphy, president of Fujitsu Softek. “We’re recovering from a period of over-provisioning, when storage was cheap and people bought too much. There is a transition going on. We’re talking to the architecture groups, and the CFO is heavily involved.”

The economic slowdown has meant many companies have decided to do nothing rather than make the wrong decision. This should not be interpreted by storage software suppliers to mean they are headed in the wrong direction, Lee suggests.

As the storage management software suppliers build out the hierarchy of storage management tools and applications, points of departure will occur where each supplier seeks to differentiate. An industry historically dominated by point solution providers, for example in the backup and replication markets, is now shifting to suppliers that can address more storage management requirements with an integrated approach.

“It’s not sufficient to talk about containing costs. Suppliers must provide some upside to the business in the process, and that plays into the portfolio view,” Lee suggests. “Many of the suppliers get it, and for some, the light has not yet come on.”

The following case histories of experiences of IT managers with available storage software solutions provide a snapshot of where users are today as the enterprise storage software market transitions.

Tokyo-Mitsubishi Bank Gains View Into What's Stored

THE BANK OF TOKYO-MITSUBISHI Limited is the world's fourth largest bank, with total assets of more than \$650 billion and in 1989 became the first Japanese bank to be listed on the New York Stock Exchange. The bank puts a high priority on IT and e-business initiatives and typically pursues innovative technology options. The investment banking arm of the bank, Tokyo-Mitsubishi International (TMI) PLC, formed by a merger in 1996 and headquartered in London, last year began researching storage area network (SAN) alternatives to its growing farm of servers running Microsoft's Windows NT.

The London bank would purchase a new NT server whenever the IT group needed more disk space or had a new application to service. The hope was that the SAN would lower the cost of ownership and help the organization gain some control over its growing storage capacity. TMI now supports approximately 500 users on 75 servers.

During an evaluation many products were reviewed, but the firm decided on Storage Manager from Fujitsu Softek, Sunnyvale, Calif. "The real surprise for us was the space management module in the Fujitsu Softek product line," said Paul Rogers, head of IT production in the London office. "When we took a look at it, there was nothing on the market like it. It worked in a completely different way from what we expected."

IT department staff tends to look at abstractions of data such as file systems and volumes, and not so much at what data it is, or how it is used (or not used). Storage Manager builds a database of all the files on the system, and then reports

on a variety of factors, including when files were last accessed, what files are larger than 3Mb or some other threshold size, file types, and so on. "We found entire backups of development directories that no one had touched for years," Rogers said. "There was tons of space not being properly managed."

The TMI team has since learned how to set Storage Manager to automate certain actions, such as deleting temporary files when file systems reach 90-percent full, deleting files of a certain type or age, or automatically archiving files more than two years old. TMI has been able to forestall the requirement for additional storage capacity for now, since so much space was cleared after the tool began to be used. The firm got an immediate 10-percent reduction in stored data when it announced the tool was going in, since users deleted files they did not need or wanted to hide. The largest single file eliminated was a 351Mb e-mail archive in a user directory, not accessed in two years. "And we had 25 copies of it on tape," Rogers

said. "So it's helping users get more organized about what they want to keep and how they want to archive it."

Another benefit was that the IT staff could see executable files in user directories, for programs such as WinZip that users download off the Web. "We need to license that so we don't want users downloading it," Rogers said. Similarly, applications duplicated across the network can be centralized.

TMI does use other storage software, including Veritas and Tivoli for backup. "Storage Manager is in many ways complementary to those products," Rogers said. "I think they opened up a niche in the market. This product stands by itself."

Fujitsu Softek's Storage Manager, a new product that shipped in June of this year, provides a single console view into mainframe and open systems storage resources. It includes a policy and automation engine, event management, activity scheduler and a reporting application. •

SOFTEK

Simplifying Data Storage