

# trends

## OUR VIEW: OVERSTATING THE OBVIOUS

Almost every vendor briefing I've had lately seems to start with some variation of this statement: "Worldwide data growth is unprecedented, and it's not stopping anytime soon."

So I'm proposing a shift: Vendors, cut down on the time spent telling us about the data growth explosion. It's obvious to everyone that data is exploding, especially to the storage managers and admins who are watching it fill up disks and slow down backups. Instead, let's get down to the business of storing it intelligently. It's not enough to create a bunch of fanfare around releasing a bigger disk. Why does only one vendor (NetApp) include dedupe in its storage OS? It's a smart technology that saves a ton of time and space for businesses.

The time we'll save is better spent deleting, deduplicating, compressing, virtualizing and otherwise getting this pile of information down to a manageable size. It's certainly not getting any smaller, and vendors are the ones with the resources to develop the technology that's needed. —CC



## Microsoft wants to resurrect DAS

**M**ICROSOFT BREATHED some new life into an old-school storage technology when it recently recommended that users should consider using DAS with Exchange as a way to cut costs. Exchange 2007, the newest version of the popular email server, features easier replication, and the pairing of DAS and Exchange can be an effective way to handle inflated mailbox sizes.

"When we were doing the planning for Exchange 2007, one of the things that became clear when you talked to customers was that mailbox quotas at most enterprises hadn't kept up with user demand," says Microsoft's Jon Orton, senior technical product manager of the Exchange Server team. "Users end up spending a lot of time just managing their mailbox."

Having dedicated DAS servers for Exchange can be very appealing to storage managers. Matt Lavallee, director of technology at Shrewsbury, MA-based MLS Property Information Network Inc., which serves about 30,000 members, recently implemented DAS to run Exchange 2007 and SQL server. "It's the performance, really, when it comes right down to it," he says of choosing that setup. He considered putting it on iSCSI, but "to get the volume that Exchange and SQL want, you have to spend four times as much on the infrastructure just because of that app," he says. "That means you're also spending four times as much for every other node you want to have networked because of that one outlier."

But is DAS viable for both small and large businesses? According to Matt Baker, storage specialist at Dell, "DAS-oriented solutions really service two poles of possible deployment: small customers who haven't yet adopted SANs and don't

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necessarily want to for Exchange, and customers looking to deploy atypically large mailboxes." He also mentions large businesses with a dedicated Exchange environment using DAS, where staffers might manage both servers and storage.

Using Exchange with DAS can leave ownership of that storage with the Exchange team. "DAS is pretty simple to manage," says Microsoft's Orton. "We're finding that many Exchange administrators are capable of upkeep and, once it's deployed, it's pretty manageable."

Part of DAS' renewed appeal for Exchange is Exchange 2007's new storage-friendly feature: Cluster Continuous Replication (CCR). "Each node in a cluster has its own independent copy of the data, and the data replication is handled by Exchange," says Orton.

Dell's Baker points out that there are advantages with the new method, but that with recovery, "there are two sides to every story. There's a total recovery thing to keep in mind, which is that once you've failed over, you have to repair the other side," he says. "Repair isn't necessarily any faster when you have two separate full copies of data."

Lee Johns, Hewlett-Packard's director of marketing, entry storage and storage blades, thinks Exchange 2007 is an example of applications getting more storage-smart. "More and more applications are building in storage services like replication or clustering," he says. "That can lend itself to DAS implementations." He says DAS has become more acceptable as it's become more capable.

Baker says he doesn't see a mass exodus from SANs anytime soon, and that virtualization may actually drive people away from DAS. "It's sort of this creative tension in the marketplace," he says. "One trend is making applications intelligent enough to use DAS architecture and the other is really wanting to put storage in a central place to facilitate things like mobility."

Using DAS for selected apps like Exchange might be the best way for this abiding technology to live on. "iSCSI and Fibre are both viable, but then you're creating all kinds of infrastructure for something that has extreme throughput requirements," says MLS' Lavallee. "Why weigh down the entire infrastructure or pay all kinds of money for infrastructure for one specific application?" —CC



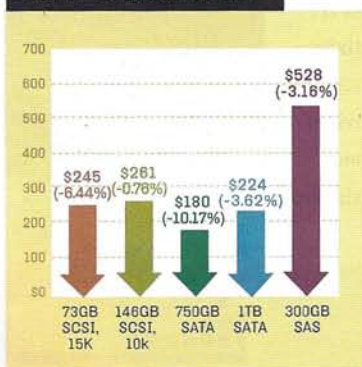
“WHY PAY ALL KINDS OF MONEY FOR INFRASTRUCTURE FOR ONE SPECIFIC APPLICATION?”

## THE REAL DEAL

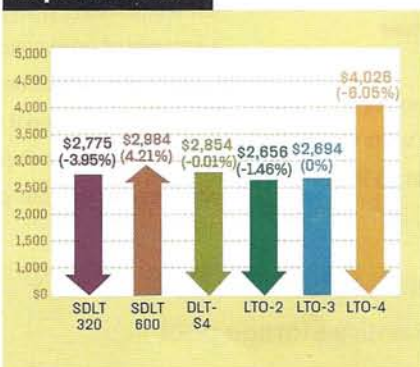
# Hard drive prices down across the board

Hard drive prices are down this month among all of the categories we track. The biggest drop is for the 750GB SATA drive, down 10% since last month to \$180, part of its continued six-month slide. Among tape drives, the SDLT-320 dropped, but SDLT-600 rose 4% and is up overall since the summer. The cost of an LTO-4 drive keeps going down, paring a little more than 6% off its price this month. Media prices haven't budged much over the past few months, although LTO-3 and LTO-4 registered drops of approximately 5% and 3%, respectively.

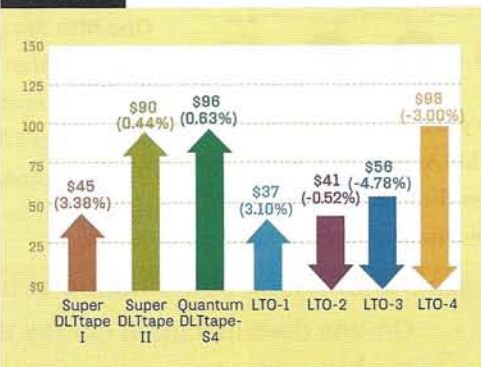
### Hard disk drives



### Tape drives



### Media



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