

Disk-to-disk backup lowers costs, increases reliability

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LAS VEGAS -- Nexsan Technologies has introduced [InfiniSAN D2D](#) disk-to-disk backup, an enterprise-class storage solution that attempts to lower storage TCO by eschewing expensive tape backup hardware in favor of highly available ATA disk arrays.

InfiniSAN D2D supports remote mirroring and replication, as well as data snapshots. (With data snapshots, a data image, rather than the actual data, is manipulated, after which any modifications can be re-synchronized.) The product can also help to reduce the downtime associated with system restoration from tape, providing immediate access to online storage, which can be scaled from 160GB to multiple petabytes of capacity and supports an unlimited number of users.

The D2D backup application is typically installed on a server, although the company also offers an identical desktop version that can reside on any local system, allowing users to control their own backups.

With disk-to-disk technology, backups are faster than tape, and restores are immediate, according to the company. D2D uses Real-Time Agents (RTAs), which monitor a computer's file I/O activity and notify the D2D server of any data changes. The server keeps a list of detected changes, which are then backed up during a scheduled backup. RTAs eliminate the need for the server to compare files and build a backup list, thereby reducing backup time considerably. Additionally, D2D can back up hot databases by interfacing with SQL and Oracle APIs.

Used in conjunction with Nexsan's [InfiniSAN ATAbuy](#) RAID hardware, D2D can employ RTAs to facilitate disaster recovery. By backing up live data to an ATAbuy, and then backing up the ATAbuy to yet another ATAbuy on a WAN, the full data set must be backed up only once, maintaining an "on-site online" backup as well as an "off-site online" backup. D2D provides instant access to these data sets. ATAbuy also supports storage virtualization via Online Capacity Expansion (OCE), Dynamic Array Expansion (DAE), and Dynamic Partition Expansion (DPE). Rik Mussman, Vice President of Technical Systems for Nexsan, said D2D has "hit a huge nerve" in the storage arena. "Expensive, tape-based backup systems from companies like IBM are good for Fortune 1000 companies, but out of the price range of some enterprises," said Mussman. "If a lesser-known company offers a high-end storage solution that costs, say, 10 percent less than IBM's, you're going to go with IBM because of brand recognition. With D2D, there's no such argument; the TCO for D2D is considerably lower. It's a high-end product at a low-end cost."

Mussman also cites advantages that hot-swappable, hot-pluggable ATA disk drives enjoy over tapes. "A tape library works just fine until you need to restore data," he says. "With D2D, there are no bar codes to scan, no tape swapping or hunting for backup jobs stored on tape, and no degradation of the media."

InfiniSAN D2D is available for Windows NT/2000, Linux and Solaris; HP-UX and AIX versions are expected in Q1 2002.