

IBM debuts management software for SSDs

INFOSTOR

By Kevin Komiega

May 21, 2009 -- IBM is now offering nine different data management software tools for managing and moving data in tiered storage environments with solid-state disk (SSD) drives.

The company's portfolio includes a suite of software tools that control the migration, monitoring and dynamic placement of data on **SSDs**.

The tools include "smart data placement" technology in the form of IBM's Data Facility Storage Management Subsystem (DFSMS) for zSeries and DS8000 environments. For its Power Systems servers, IBM now offers SSD Data Balancer tools that allow administrators to move frequently accessed data to SSDs, while moving infrequently accessed data to traditional hard drives.

On the hardware front, IBM also expanded its use of SSDs to include Power systems, joining System x servers and System Storage DS8000 devices, which already offer SSDs.

SSDs will be supported on all POWER6 systems, from Blades to enterprise servers, as well as on the System x lineup of diskless drive options with new SATA-style SSDs. A 50GB drive, designed for higher I/O performance, is available in either a 2.5-inch or 3.5-inch form factor for blades and System x rack and tower servers. The SSDs support Windows, Linux, and ESX Server.

IBM also invested in integrating DS8000 storage systems with servers and software to maximize the performance benefit of SSDs. The integrated solution will enable users to optimize the hybrid environment with SSDs and HDDs.

Mike Desens, IBM's vice president of system design, says the company's approach to SSDs recognizes that most users will have hybrid storage environments that use high-speed SSDs in tandem with HDDs.

"We have been enabling [the use of SSDs] across all of our hardware, operating system and software platforms in order to help customers utilize SSDs in the right ways and to get data onto the right tier of storage," says Desens.

He says flash-based SSD drives have the potential to revolutionize the industry, but prices still need to come down.

"SSDs are going to have a huge impact on the industry as prices continue to come down at a quicker pace than traditional HDDs and we see more capacity," says Desens.

IBM is using two different types of single-level cell (SLC) SSDs, including drives from STEC and Fusion-io. Desens says IBM is working on ways to use higher capacity multi-level cell (MLC) technology.

"SLC technology is reliable through wear-leveling, over provisioning and error correction technologies, but MLC still needs more work and innovation to bring it into enterprise-class applications," he says.