



Reuters: IBM reworks storage strategy

Mon Sep 8, 2008 8:19am EDT

By Eric Auchard

SAN JOSE, California (Reuters) - IBM (IBM.N: [Quote](#), [Profile](#), [Research](#), [Stock Buzz](#)) is making a major push on Monday to upgrade computer storage products and services it offers customers struggling to manage mountainous piles of data being created inside their organizations.

The company is announcing more than 30 new or upgraded products or services that are the result of a \$2 billion investment over the last three years involving thousands of IBM researchers and eight acquisitions of data storage start-ups.

Even as the economy slows and businesses move to slash spending on computers and network gear, sales of storage will continue to spiral -- at least until someone invents a way for companies to stop collecting so much data, analysts say.

Proliferating data storage requirements brought on both by customer demands to keep information instantly available and by mounting record-keeping mandated by regulators are forcing companies to retool their corporate data centers.

IBM said its new line-up of storage products and services are designed to help customers manage the transition from static data archives to dynamic storehouses ready to manage two-way data flows over the Internet.

"IBM is trying to illustrate how many facets of their storage offerings can be viewed as something strategic and cohesive as opposed to just another series of 'cool products,'" said analyst Clay Ryder, the president of Sageza Group.

International Business Machines Corp said it aims to help customers -- big banks, retailers, government agencies and other organizations -- contend with the growing digitization of entertainment, health care, security and retail information.

IBM estimates that the average individual's "information footprint" -- the amount of data connected to a person -- will grow to more than 16 terabytes by 2020 from roughly one terabyte, or trillion bytes, of data currently.

"IBM is saying let's talk about general business requirements first, then will go the technology bag of tricks and figure out what the customers need," said Mary Turner, an analyst with Enterprise Strategy Group. "This is a cross business-unit effort."

Competitively, IBM is showcasing how the breadth of its storage-related hardware, software and related services can be made to work together for customers small and large.

Only EMC Corp (EMC.N: [Quote](#), [Profile](#), [Research](#), [Stock Buzz](#)), the leading independent storage maker, has articulated a similarly broad strategy for managing all parts of an organization's "information infrastructure," analysts said. Hewlett-Packard (HPQ.N: [Quote](#), [Profile](#), [Research](#),

Stock Buzz) and Dell (DELL.O: Quote, Profile, Research, Stock Buzz) still sell storage largely tied to their server products, while Sun Microsystems (JAVA.O: Quote, Profile, Research, Stock Buzz) is also active in the tape market, but its offerings are nowhere near as comprehensive as IBM or EMC.

SQUEEZING IN MORE DATA

"At some level IBM is announcing the latest, greatest versions of products that have been around quite a while," said Charles King, an analyst with Pund-IT Research. It is also showing off really interesting next-generation capabilities."

Seeking to show it can cut the costs of storing massive amounts of data, IBM is demonstrating new technology from its January acquisition of XIV using solid-state memory instead of disk-drives or magnetic tape now used to store data.

The transition from disk drives to flash-memory has begun to occur in consumer electronics, but IBM's announcement suggests that solid state storage -- memory with no moving parts -- is becoming cost effective in big business storage.

"This is the industry's first stab at big solid state storage," Ryder said. "If you don't have spindles and disks, you have no parts to fail and you can use less power."

And it is incorporating the latest data "deduplication" technology that eliminates the need to keep many copies of the same information, a move that promises to help customers save vastly more information in the same amount of office space.

Making use of software and hardware it acquired by buying Diligent Technologies in April, IBM said the deduplication technology can reduced redundant data by up to 25 to 1.

Deduplication joins storage virtualization, another technique that IBM and it rivals are promoting to increase the usage of existing storage equipment while making it easier to manage and cutting energy usage.

Companies are running out of room in existing data centers to store these growing piles of information.

IBM is offering a high-density tape storage library system that uses robotic arms to locate and read archival data tapes that holds three times more cartridges in the same floor space. Businesses can store up to three petabytes, or quadrillion bits, of data in 10 square feet of floor space, it said.

To secure this data, the company also is offering systems with automatic data encryption that take advantage of disk supplier Seagate Technology's (STX.N: Quote, Profile, Research, Stock Buzz) encrypted hard drives.