ARTICLE

Solution-Soft

Just A Stone's Throw To Piecing A Database Together

Stone Container Optimizes Database Management With Disk Space Manager

Article by Beth Miller

Do you know where your production database and other files are tonight? On which disks? In how many pieces? Craig Lalley of Stone Container (Chicago, Ill.) did. As former senior systems programmer for the company's Corrugated Division, Lalley was responsible for managing a multitude of computers and operating systems, along with the Goliath-sized projects they are programmed to perform. For Lalley and his colleagues, optimizing systems performance and efficiency is always critical.

With more than 30,000 workers and 60 plants in 83 locations across the country, Stone Container must take a proactive approach to solving its database and file management performance issues. The company also operates plants in Australia, Europe, Honduras and Puerto Rico - generating more than $7 billion in annual revenue, of which $3 billion is contributed by the Corrugated Division. Systems support and maintenance for this expansive organization is largely an automated and painless process, with house cleaning, detail dataset repacking and other activities performed on a weekly basis.

FRAGMENTED THOUGHTS

However, when Lalley saw that disk space was being heavily allocated by routine dataset expansions, active spool files and system log files, he figured resolving his disk space management issues wouldn't be quite as simple. To help solve his volumeset overruns, Lalley turned to the database tool technology of Bradmark Inc. (Houston, Texas) and its Disk Space Manager (DSM). "When disk space runs low, it tends to become really fragmented," says Lalley. "We needed a way to create large areas of contiguous free space."

The problem Lalley faced is a fairly common one; his files were unevenly allocated among the disks, causing poor performance. Whenever tasks such as Restore, Copy, Build, DButil and Dynamic Detail Dataset Expansion are performed on a fragmented system, disk space is allocated exponentially. Depending on the free disk space, the operating system places a file wherever disks have available space. Database files typically performed much better when spread evenly among the disks. "With Disk Space Manager, we can manage volumesets and volume classes with a single command," says Lalley.

Another space problem Stone Container faced was inability to complete a system update. "To create free space on LDEV1, we were actually cutting the tape and unloading stuff from the machine to make sure we had enough space to perform the update correctly," explains Lalley. "With Bradmark's Disk Space Manager, we accomplish this task in a few short key strokes."

Before Disk Space Manager, Lalley manually identified the cause and location of performance bottlenecks in each of his systems by doing a complex, time-consuming file report. "We eliminated the manual processes altogether using Disk Space Manager's automated features," says Lalley.

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FINDING AN ANSWER

At the time Lalley began looking for a tool to solve his disk space fragmentation, there were few products available. Bradmark's DSM, developed by Paul Wang's Solution-Soft, was among the first. "We reviewed the few products on the market and simply felt that the intelligence behind Bradmark's product was superior," says Lalley.

Within DSM's slate of key features are 20 commands available to help users manage and optimize disk space allocation. Of those commands, three are frequently used by Lalley to help enchance Stone Container's database efficiency and disk space utility. "ManageSet and PopulateSet have been two of our favorite commands," he says. According to Lalley, the ManageSet command accomplishes all the things the defragmentor does in one fell swoop. ManageSet trims a system's files, returning any unused space to the operating system and consolidates them concurrently - spreading all small, large and medium-sized files then defragmenting the system.

Lalley says DSM's PopulateSet Command is especially helpful when adding a new disk drive. "With this command, I can easily populate our new volume so we don't get any bottleneck in the system," he says. Lalley's future projects at Stone Container include a roll out of several new SCSI drives. He plans to make DSM a vital part of the roll out. "If you've been in the business long enough, you know which tools you can rely on," he points out. "Disk Space Manager is one of those. While it sits in the background, you always know it's there. You can depend on it. For me, it's in a category by itself."