MID-STATE BANK AND TRUST

DSI Solid State Disk technology leverages I/O processor power

With DSI's SSD product, "we cut batch processing time in half."

—Brantley Pettigrew

CUSTOMER'S OBJECTIVE:
To shorten batch run times and improve on-line response times.

SOLUTION:
DSI3200 Solid State Disk from DSI.

BENEFITS:
Dramatic system performance improvements, elimination of I/O bottlenecks, faster response times.

DSI3200 QUICK SPECS:
3 Gigabytes per Second
250,000 IOPS
16-64 GB Storage
2-8 FC Links (2Gb)

MID-STATE BANK AND TRUST

Mid-State Bank and Trust is headquartered in Arroyo Grande, California. With 41 branch offices located along California's scenic Highway 101 corridor, Mid-State Bank has over $2.3 billion in assets and over 150,000 customer accounts. Mid-State has been a leader in providing essential services to California Coast residents and businesses since 1961.

MANAGING COMPANY GROWTH

Mid-State Bank's management team knows that adequate processing power is essential to managing such growth. And with increasing demands being placed on the bank's processing equipment, Vice President and Information Technology Director Brantley Pettigrew felt that the bank's Unisys mainframe was no longer meeting the bank's needs.

Pettigrew saw the system's near-zero idle time as evidence of processor deficiency, so he added two more processors and some memory to his mainframe, allowing him to shrink his batch processing by about six hours each evening.

dsi dynamic solutions international
www.dynamicsolutions.com
1.800.641.5215

"Turbocharge I/O Performance with Solid State Disk from Dynamic Solutions International"

*At **250,000 I/Os Per Second** and storage of up to **64 GB**, the DSI3200 balances performance with capacity*

But when Pettigrew decided to enhance his new mainframe, he took a different tack. Observing that processor time was still available while I/Os were waiting in the queue led him to wonder whether solid-state disk might solve his problem. "I knew I had an I/O bottleneck problem," Pettigrew recalls.

An I/O bottleneck occurs when a processor must wait to receive I/Os from slow rotational or cached disk. In this scenario, the processor is capable of doing more work, but is not allowed to perform at peak levels, due to the disk subsystem's inefficiency.

"*You want to eliminate that wait,*" says Pettigrew, "*and there's always going to be a wait on RAID disk.*"

ADVANTAGES OF SOLID STATE DISK

IT professionals have long used solid-state disk as a means of improving processor performance, since solid-state disk is some 500 times faster than magnetic disk. The theory behind it is that there are certain files the processor must access again and again during normal processing. In many cases, half of a system's I/Os access only 5 percent of files on disk. These high-traffic files are known as "hot files." On a cost-per-megabyte basis, the DDRAM found in solid-state disk is more expensive than RAID disk. But if you could move half of your I/Os to solid-state disk, you would see a dramatic improvement in performance. And if half of your I/Os use only 5 percent of your disk, getting huge performance increases is remarkably inexpensive.

Pettigrew turned to the internet to find a source for Unisys-compatible solid state disk, and found DSI. He wasted no time in contacting **Spencer Clark**, regional sales manager at DSI.

SHERLOCK UNLOCKS I/O MYSTERY

Clark dispatched DSI's **Sherlock File Candidate Utility**, which identified frequently accessed files and listed their sizes. "*Sherlock helped us to determine which files to move to get the most bang for the buck,*" says Pettigrew.

Pettigrew moved 80 million I/Os to the sold state disk unit Clark furnished, and saw an immediate improvement: "*We cut batch processing time in half. Memo Post took four hours and required us to stop other jobs. Now it takes two hours, no other jobs are suspended, and the tellers don't know it's running.*"

End-of-the-month processing, which used to finish at around 5:00 PM, now finishes promptly at 7:30 AM.

Pettigrew was so impressed with the results that he bought a new DSI3200 fibre based solid state disk system to replace his original SSD system.

"*It's great to see our customers gain such huge performance boosts from such a minimal investment,*" says Clark. "*DSI prides itself on providing best-of-breed storage solutions.*"

Needless to say, Brantley Pettigrew is delighted with solid-state disk. He is more than willing to answer your questions and can be reached at **bpettigrew@midstatebank.com**.

For more information on solid-state disk products, please contact DSI at:

TOLL FREE: 800.641.5215
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