Mainline Helps School Apparel Improve Its Manufacturing and Fulfillment System with IBM Power and Storage Solutions

Many parents, teachers and school officials believe that having children wear school uniforms or follow a dress code is a positive way to reduce discipline problems and promote school safety. Others believe it curbs freedom of expression. While the debate about regulating school attire in public schools continues, the adoption of school uniforms in public schools increased from less than 1% in the 1994-95 school year to 23% in 2012. As a result, School Apparel, Inc., a manufacturer of school wear and dress code apparel for children, is thriving.

School Apparel is a privately held company with corporate headquarters in Burlingame, California. Its operations include a manufacturing facility in Star City, Arkansas, which employs several hundred people, and a satellite office in San Jose, California. The company also makes a full line of men's and women's career and corporate casual apparel.

THE CHALLENGE

Brian Botelho is the systems engineering manager responsible for networking, servers, hardware, maintenance and operating systems upgrades. He was facing challenges with the IBM Power® 550 in San Jose and the IBM Power® 520 at the Star City operation. The servers were the basis of the company's manufacturing and fulfillment IT infrastructure and crucial to the company's business. However, the aging systems were causing downtime, providing inadequate backup/recovery and low performance, and compromising efficiency. Botelho wanted to centralize and simplify the IT environment, increase productivity and reduce IT costs.

He called Mainline Information Systems, an IBM Premier Business Partner. The account executive put together a team of experts from Mainline who had previously assisted with the evaluation, installation and implementation of the current aging servers. The Mainline team evaluated the performance parameters of the system and demonstrated that School Apparel was using 80-90% of the available disk space, while pointing out other deficiencies that included near-capacity processor loads. The team recommended a cost-effective solution that capitalized on IBM incentives and financing.

THE SOLUTION

The solution included replacing the two aging servers with an IBM Power 740 Express server in San Jose and a Power 720 Express server in Star City, tape backup for each facility with two IBM TS3100 Tape Library Express systems and Mainline Professional Services.

IBM's Power 740 Express server is a small to midsize database server that is fueled by the outstanding performance of the POWER7® processor, making it possible for applications to run faster with fewer processors, which can result in lower per-core software licensing costs. The Power 740 Express with disk drives has faster I/O, including a new LTO-4 tape drive, which allows a realignment of the workload from two partitions on the previous server to three. One partition handles production and one handles the iSCSI workload, while the third handles the development/continuous operations backup, providing better balancing capability. It also provides more horsepower, better performance and a three-year warranty.

Customer: School Apparel

Headquarters: Star City, AR

THE CHALLENGE

- Outdated servers
- Slow response times
- Downtime
- Near-capacity processor loads
- Limited storage

THE SOLUTION

- IBM Power 740 Express Server
- IBM Power 720 Express Server
- IBM System Storage TS3100 Tape Library Express
- Mainline Professional Services

THE RESULTS

- Proven reliability and security
- Virus-resistant architecture
- Improved productivity
- Simplified IT environment
- Highly flexible and scalable system
- Cost-efficiency
- High performance and capacity

IBM's Power 720 Express server is a reliable, secure distributed application server or consolidation server for small or midsized businesses using UNIX, IBM i and Linux workloads. It is a complete, integrated business system that delivers a highly scalable and virus-resistant architecture with a stable database and middleware foundation for efficiently deploying business processing applications. As a distributed application server, it is designed with capabilities that enable more work to be processed with less operational disruption for branch office and in-store applications. The new Power 720 provided School Apparel's Star City location with better performance and lower recurring costs, as well as the capability for future expansion that the previous system could not provide.

The IBM TS3100 Tape Library Express is a highly flexible LTO magnetic tape library designed to provide high-capacity, high-performance tape backup. It offers outstanding capacity, performance and reliability for cost-effective backup, restore and archive functions for midrange storage environments.

Mainline Professional Services provided the planning, configuration and implementation.

THE RESULTS

"We have definitely seen storage performance increase," Botelho noted. "In the past, we were running 80-90% of disks with 20% utility. Now we're down to 20-30% utilization with 70-80% utility. Batch jobs are much faster, and backing up tape, which took 12 hours on the old system, now takes three to five hours."

"Mainline was very accommodating and adaptable," Botelho continued, "and provided School Apparel, Inc., with a tailored solution, from which we realized great results."

"Although it was hard for us to plan, Mainline did a good job and rearranged their schedules for us." He concluded, "We consider Mainline an IT partner."

For more information, call your Mainline account representative or call Mainline directly at 866.490.MAIN(6246).