



Island Trees School District advances smart, affordable IT growth

With IBM BladeCenter and Global Computer Systems

Overview

The need

Island Trees School District needed a cost-effective solution to improve reliability, simplify maintenance and reduce energy consumption in their computer labs.

The solution

Island Trees worked with IBM Premier Business Partner Global Computer Systems to implement a IBM® BladeCenter® H chassis, five HS22V servers with Intel® Xeon® processors and an IBM System Storage® DS3500 with an EXP 3500 Express.

The benefit

The solution enables patches and new software to be applied and distributed in minutes instead of weeks, saves money through energy conservation and delivers a scalable, flexible IT environment.

Amid dwindling budgets for school funding, Island Trees School District faced a tough question: How could it upgrade its network of classroom desktop computers and replace them with a solution that was affordable, flexible and powerful? They found an answer after consulting with IBM Premier Business Partner Global Computer Systems.

Located in Levittown, New York, Island Trees public school district was founded 1902. The district now operates a preschool center, two elementary schools, one middle school and one high school, serving about 2,600 students in grades K through 12.

Supporting the students are about 400 administrators, teachers and custodial staff. Within the district, there are about 840 desktop computers, 210 of which are located at six computer labs where students learn desktop publishing and other technology skills.

Making the grade with minimal resources

With just one technician responsible for the entire infrastructure, issues such as student wear and tear, and problems resulting from students accessing unauthorized programs or files online, made it very difficult to keep the computers functional, says John Rezek, district director of technology at Island Trees School District.

“Even with filters, the students would go on websites and corrupt the operating system. It was becoming a constant battle,” says Rezek. “We were trying to catch up with fixing computers because students would corrupt the operating system and make them useless.”



“IBM and Global Computer Systems really stepped up to the plate and handled it well.”

—John Rezek, district director of technology,
Island Trees School District



These maintenance challenges were having a major impact on instructors and students at Island Trees. Teachers often had to deal with unexpected equipment failure, and students often had to work on outdated or mal-functioning software for homework and projects. At the same time, the labs were becoming difficult to keep cool due to the large amount of heat dissipated by the aging desktop computer infrastructure.

“We had to figure out a way so that we didn’t have so much equipment constantly down,” says Rezek. “When teachers take their students down to the lab, the time they have in there is critical.”

Strict requirements for IT overhaul

It was clear to Rezek that something had to be done. He also knew that this problem would have to be solved in an environment of dwindling education funding. Explains Rezek, “We needed to get the most bang for the dollar because school districts in this economy are very restricted as far as spending.”

After a comprehensive evaluation process, Rezek says a proposal from IBM Premier Business Partner Global Computer Systems made the passing grade.

The solution offered by Global Computer Systems includes an IBM BladeCenter H chassis with redundant Ethernet switches and five HS22V blade servers with intelligent and energy-efficient Intel® Xeon® processors. The BladeCenter is attached via serial attached SCSI (SAS) to an IBM System Storage DS3500 and an IBM System Storage EXP3500 Express for additional capacity.

“Beyond the name and the solid performance and reliability of IBM and Intel, it really came in at the best price,” says Rezek. “I needed to know that whoever the vendor was going to be, that they would take ownership and answer my problems. And that’s what I felt with IBM and Global Computer Systems.”

Thin clients and IBM: A new education paradigm

Rather than replace the older standalone desktop PCs from Dell with new desktops, Island Trees used the IBM solution to implement 210 thin clients. The Wyse Thin Clients enable management simplicity and help conserve energy in the classroom computer labs. In fact, the clients use just 7 watts apiece instead of about 300 watts per old PC.

Solution components

Hardware

- IBM® BladeCenter® H chassis
- IBM BladeCenter HS22V
- IBM System Storage® DS3500
- IBM System Storage EXP3500
- Intel® Xeon® processors

Software

- VMware

Business Partner

- Global Computer Systems
-



This centralized thin client approach, managed through VMware, allows Rezek to rapidly deploy new software images and patches while minimizing hardware failure. Because the thin clients occupy a tiny slice of desk space compared to a traditional desktop PC, students have room on their desks for books, notes Rezek.

Overcoming time constraints

Rezek had some strict time requirements to get the solution in place before the school year began. Working with IBM and Global Computer Systems, the solution was implemented in less than a month.

Rezek describes the implementation as seamless. “I was extremely satisfied with the timeframe,” he says. “I had anticipated a much longer period of time to get the equipment up and working correctly, so it really took me by surprise. IBM and Global Computer Systems really stepped up to the plate and handled it well.”

Delivering lasting benefits

The solution has already been a huge benefit for teachers, staff and students at Island Trees School District. For one, it has greatly reduced the time and money required to add or replace faulty hardware components. On the software side, virtualization means the school can install new applications and push patches and other security updates to all of the thin clients in a matter of minutes instead of weeks, and with much greater consistency. And the systems can now be remotely monitored by an administrator for unauthorized downloads or other non-approved uses by students. Because the solution is designed to scale from 210 computers up to 900 computers, the district can easily add new blades to support new applications and additional thin clients over time.

“It’s great,” says Rezek. “We’re just thrilled that everything seems to be working so well.”

The solution also bodes well for the future in other ways. By the 2013 school year, Rezek explains, the state of New York will be conducting standardized tests via computer. The new infrastructure means Island Trees can easily deploy the tests on its thin client network.

“We could easily do this with the virtualization,” says Rezek. “It’s pretty mindboggling how simple it would be for the students to take a test.”

For more information

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For more information about IBM Premier Business Partner Global
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