



## ▶ Simple. Efficient. Green.

*Emtec's virtual desktop solution for Stafford Township School District passes with flying colors.*

School districts across the country are trying to do more with less, so simplicity and efficiency are a top priority. Increasingly, they are looking to desktop virtualization solutions as a sensible way to deliver applications and resources to students while reducing IT costs.

Desktop virtualization solutions allow school IT administrators to centrally manage virtual desktops from a school's data center, significantly reducing maintenance time and costs associated with legacy PC deployments. In addition, a desktop virtualization solution can be an energy-efficient alternative to traditional PCs. Even though PC prices are dropping and seemingly attractive, the ongoing maintenance and support costs can be substantial.

Bill Deren, IT Supervisor at Stafford Township School District in Ocean County, N.J., set out to attain some of these benefits with a desktop virtualization project in the district's Ronald L. Meinders Primary Learning Center, which serves approximately 300 kindergarten students.

What's more, Deren understood the project offered an opportunity to extend the school district's energy conservation efforts. The district is a certified Energy Star Partner, and the Stafford Township Board of Education has made "developing a realistic energy ethic and awareness of energy needs and costs" a cornerstone of its mission.

"We have installed solar panels on three of our buildings, and we have an energy manager to institute policies for energy conservation," said Deren. "We're very conscious of our energy footprint, as well as the cost of said footprint. This allows us to put more of our money into the education side of things."

### The Education IT Experts

Deren called on the experts at Emtec to help him realize his vision for a desktop virtualization solution. Emtec is a veteran provider of K-12 technology solutions, with a strong reputation for working within the boundaries of limited budgets, classroom schedules and tight time frames to deliver solutions that meet the unique needs of students and educators.

Emtec provided guidance, procurement and implementation services to help the district create 100 virtualized desktops in the Primary Learning Center. With desktop virtualization, the entire desktop — including operating system, applications and data — is transformed into an image that is stored and executed on a server. While the end-user retains the familiar desktop experience, IT gains the ability to manage a large number of workstations from the data center rather than at each end-user device, vastly improving IT efficiency.

### ▶ Classroom Benefits of Desktop Virtualization

- *Students and teacher get the same PC experience (no need to learn new technology)*
- *More computer stations in the classroom for students without extra cost*
- *Central server and easy management returns control to teachers*
- *No extra IT support required for more computers*
- *Rugged enough for K-12 classrooms without risk of equipment breakage.*

“The desktops were six years old, and management of each system was eating up my IT staff’s time,” said Deren. “For example, student evaluation programs have to be updated every year. Although we were able to automate a good portion of that, we still had to go around and turn on every single machine over the summer to make sure it got the update then go back and check to make sure it completed properly.”

“With the new scenario where all these machines use a single image, all we have to do is update that single image and then redeploy it. I can’t even imagine a simpler scenario. From a management perspective, it can’t get any better. We don’t have to worry about writing scripts, repackaging software and pushing it out. It will certainly save us a lot of time in the long run.”

### Zero Clients Make the Grade

Emtec’s solution for Stafford Township School District is based on VMware View and uses HP servers and local storage. Emtec also created a security server that allows remote access into the virtual environment through a secure gateway for their zero clients, conventional laptops or PCs.

Although Deren had originally considered just repurposing the old PCs as thin clients, he changed his mind after Emtec Senior Solutions Architect Gerald Ano brought in one of the Wyse zero clients for a demo. Plus some grant money came available which made for perfect timing.

A zero client is essentially a connectivity device optimized for the desktop virtualization environment. With no memory, processor or operating system, it is the ultimate in simplicity and efficiency. Zero clients can be deployed much faster than PCs and are easier to replace and redeploy as requirements change. Since no data resides on the zero client, they also provide an added benefit of security.

While the zero clients would allow the district to avoid the high maintenance costs associated with supporting

traditional PCs, Deren was also impressed with the “green” benefits of the zero clients. They consume just 10 percent of the power used by an equivalent workstation desktop, furthering the district’s carbon-reduction goals and helping to save on energy costs. With a lifespan of up to 10 years, the zero clients will last two to three times longer than a PC, dramatically reducing e-waste over the long term.

### Stretching the Budget

To seal the deal, Emtec Account Representative Brenda Kasica was able to gain extremely favorable pricing for the Wyse machines.

“Emtec got us a fantastic deal on the Wyse clients,” said Deren. “I don’t know how, but it was very welcome. We had a set amount we could spend, so we were happy to be able to get as many of the Wyse clients as we did. We were able to replace more of the desktops than I previously expected. We had to decide who else would get the zero clients first, which was a pleasant problem to have.”

Some of the zero clients have also been deployed into two other buildings, most in two libraries, replacing machines that were about 8 years old.

“Our teachers have commented that they’re using the new stations more than the old ones because they don’t have to wait for the machines to boot up which used to take some time, now it is almost instantaneous,” said Deren.

“I’m thrilled with the solution Emtec helped us with,” he said. “From where I’m sitting, desktop management is going to be cake compared to what we had in place before. I’m very pleased, and I’m looking forward to hopefully expanding usage of the zero clients in other places.”

Established in 1964, Emtec, Inc. is a systems integrator that provides IT services and products to the federal, state, local, education and commercial markets. Our market leading value-based management methods, coupled with best-in-class IT technology, consulting and development services, address a wide range of specific client needs, as well as support broader IT transformation initiatives. Emtec’s service capabilities span the United States, Canada and countries around the globe.