

Low-cost computing for education

Menomonee Falls expands safe online computing with NComputing and Lightspeed

Challenge

Expand computer access without an expanded budget, and effectively and affordably provide students with a safe and secure online experience.

Solution

Provide additional computing seats at a low cost with NComputing's desktop virtualization solution. Utilize Total Traffic Control from Lightspeed Systems for security.

Impact

Expanded access and secured PCs without a large budget. Additional rollouts will be on the same architecture.

Partner

Lightspeed Systems, a comprehensive and flexible network security available for educational networks, worked closely with NComputing to ensure effective and affordable security on the virtual desktops.

Pursuing excellence one student at a time is the vision of the School District of Menomonee Falls, Wisconsin. With more than 4,000 students in seven schools just north of Milwaukee, it's easier said than done. How can schools provide personalized instruction with crowded and outdated computer labs? Like most districts, Menomonee Falls faces tight, and sometimes dwindling, technology budgets. Insufficient funds often means hanging on to old computers beyond the normal four-to-five-year replacement period. That leads to higher maintenance costs, frequent crashes, and often, the inability to run the latest version of educational software. Further, the computer-to-student ratio cannot improve over time—a frustrating scenario for students, teachers, IT directors, and district officials who all want to integrate computing into the curriculum.



Menomonee Falls upgraded their science department with NComputing access devices and Lightspeed security software to add computer seats at a low cost.

The problem gets more complicated. Even if the number of computing seats could be increased, how much budget is left over to ensure a safe online experience for the children? The answer lies in a visionary approach of using best-of-breed virtualization and network security solutions that work together to create an economical and secure environment.

Getting the most use from their PCs

To get more seats without spending more money, the district installed NComputing desktop virtualization solutions into their existing computers. The NComputing solution enables multiple students to simultaneously access a single computer at a fraction of the cost.

“Each NComputing system upgrade represents a savings of about \$2,500.”

LARRY CAYO
NETWORK MANAGER
MENOMONEE FALLS SCHOOL DISTRICT

The NComputing solution is based on a simple fact: today’s PCs are so powerful that the vast majority of classroom applications only use a small fraction of the computer’s capacity. NComputing’s virtualization software and hardware tap this unused capacity so that it can be simultaneously shared by multiple students. Each student’s monitor, keyboard, and mouse connect to the shared computer through a small and very durable NComputing access device. The access device itself has no CPU, memory, or moving parts so it is rugged, durable, and easy to deploy and maintain.

Comprehensive network security

To maintain the high level of online security required in their school district, Menomonee Falls turned to another industry leader. Lightspeed Systems protects over 800 districts with security specifically designed by and for K-12 schools. With Lightspeed Systems’ Total Traffic Control filtering and security suite, Menomonee Falls was able to easily and affordably filter content, manage spam, stop viruses from spreading, authenticate users, and secure their desktops.

Real security in a virtual environment

Lightspeed Systems and NComputing worked together to combine the benefits of tailored K-12 security and desktop virtualization. In fact, not only did Menomonee Falls multiply the effective power of their PCs with NComputing, but they also secured all of their virtual desktops with Lightspeed—at no extra cost.

Network manager Larry Cayo first upgraded the high school’s science area. To make the most of their investment in desktop computers, each PC can be shared with up to five additional users using an NComputing X-series desktop virtualization kit. Each X-series kit includes virtualization software, a PCI card, and access devices. The card plugs into a PCI slot in the shared computer and has ports that connect to the access devices. Lightspeed Systems’ software was then installed on each shared PC to provide a secure online computing environment.

“Once we had Lightspeed authenticating users on the shared computer for reporting, and the Lightspeed Security Agent providing desktop antivirus, we were thrilled,” says Cayo. “Each NComputing system represents an upgrade savings of about \$2,500, making the most of our computing budget.”

Success multiplied

The deployment was so successful that the district revised their replacement cycle. Instead of replacing desktop computers one-for-one in lab or group settings, NComputing solutions were deployed. Cayo explained, “As we renovate facilities, we will replace more and more desktops, and multiply their power with NComputing virtual desktops.”

“Lightspeed Systems was absolutely part of our decision to use NComputing. We were already using its anti-virus protection, content filtering, and email archiving. Learning how well it worked with NComputing in a virtual environment made the move easy,” commented Cayo. “As we upgrade more labs, we will be using NComputing and Lightspeed because it saves us lots of money by extending the life of our desktops.”

