Stafford County Public Schools

Stafford County Public Schools migrated from NetWare® to Novell® Open Enterprise Server and consolidated servers using a virtualized environment based on SUSE® Linux Enterprise Server with Xen* for virtualization. As a result, the school district has reduced hardware costs by nearly US$200,000 and software licensing costs by 20 percent.

Overview

Stafford County Public Schools (SCPS) is one of the best school systems in the state, with students consistently scoring above state and national averages on standard-ized tests. With over 26,000 students, the school district is located forty miles south of Washington D.C.

Challenge

The IT team at SCPS takes its job very seriously, upholding its motto, "every computer, every classroom, every day." This means keeping 135 servers and thou-sands of Windows*, Macintosh* and Linux* workstations across 31 schools running smoothly. "If a teacher's using a computer during a lesson and experiences a system failure, you've lost the students completely," said Jay Cooke, supervisor of Network and Computer Services for Stafford County Public Schools. "You can't lose that teachable moment because of a technology issue."

When the school district began planning its migration from NetWare, it evaluated several alternatives, and soon recognized Linux as the standout choice. "We had looked at Windows but this would have required us to purchase additional hardware and hire more people," said Cooke. "We considered other

Linux distributions such as Red Hat* but they didn't offer the administrative tools that Open Enterprise Server has. Also, the ability to have directory-enabled file rights is a big differentiator between Novell Open Enterprise Server and other Linux platforms."

SCPS is also cognizant of its responsibility to support a heterogeneous IT environment. "We're inclusive as an organization, and allow our students and staff to use an array of devices and applications across operat-ing systems," said Cooke. "Novell's whole 'one net' strategy aligns with our vision of education, as its technology is truly cross-platform."

Solution

Working with Advanced Logic Industries (ALI), SCPS decided to migrate its NetWare servers, as well as several of its Windows servers, to a mix of Novell Open Enterprise Servers and SUSE Linux Enterprise Servers. "The reliability of SUSE Linux Enterprise Server is impressive," said Cooke. "Our users gain high availability and assured uptime. And there was no disruption in service during the migration. Users didn't even know we made the switch. Having a partner like ALI was also beneficial. If we ran into an issue they were always there."

Stafford County Public Schools at a glance:
Large public school district in Virginia

- **Industry:**
  Education
- **Location:**
  United States
- **Products and Services:**
  Novell Open Enterprise Server
  SUSE Linux Enterprise Server
- **Results:**
  – *Consolidated servers by 40 percent, saving nearly US$200,000*
  – *Reduced software licensing costs by 20 percent*
  – *Alleviated administrative burden through standardized IT environment*
  – *Improved system reliability and uptime*
  – *Transitioned to Linux with no disruption to users*

"Novell Open Enterprise Server makes it possible to have a truly enterprise-class Linux environment."

Jay Cooke
Supervisor of Network and Computer Services
Stafford County Public Schools

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> **Jay Cooke**
> *Supervisor of Network and Computer Services*
> Stafford County Public Schools

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The school system now runs several applications such as Alexandria Media Center, United Streaming, SEP* backup software, CTE WebTrac Fundamentals of Technology and Symantec* Antivirus on SUSE Linux Enterprise Server, and leverages open source tools such as Squid for proxy-caching and Xen for virtualization. Many additional applications now run on Windows as virtual guests on SUSE Linux Enterprise Server-based virtual machines. Open Enterprise Server also enabled the school system to consolidate many of its three-node clusters to two-node clusters for further cost savings.

"Leveraging Xen, which ships with SUSE Linux Enterprise Server, has allowed us to significantly consolidate our servers," said Cooke. "We can now create a virtual Windows environment on the fly, with as many virtual servers as we need. Without it, we'd have Windows servers running a mix of applications that don't 'play well' together, or we'd have to dedicate an individual server to each application."

The school system takes full advantage of many of the components of Novell Open Enterprise Server. NetStorage provides protected file access over the Internet, while Novell iPrint makes it easy for users to locate and install a printer, without requiring IT intervention.

Most importantly, the school system has improved the reliability of its infrastructure. "Novell Open Enterprise Server makes it possible to have a truly enterprise-class Linux environment," said Cooke. "With some Linux-based operating systems, servers can get too customized, making server administration a real burden on the IT staff. Novell Open Enterprise Server is easy to manage because everything is standardized and it's directory-enabled."

Results

By migrating to a mix of Novell Open Enterprise Server and SUSE Linux Enterprise Server with Xen for virtualization, SCPS has been able to consolidate physical servers by 40 percent—representing a savings so far of $200,000. "School systems like ours struggle with the cost of cyclical replacement of hardware," said Cooke. "We're watching every penny. Tools like Xen help reduce the amount of new hardware we have to purchase, and have helped us reduce our annual IT spend."

In addition, by using open source software, the school system has been able to reduce application licensing costs by 20 percent. "Because we're using Xen for virtualization, we haven't had to incur the costs of VMware*," said Cooke. "Novell Open Enterprise Server is also very important for us. It alleviates the burden on our IT staff and keeps users happy."

Based on the success of its migration to Linux, the school system is looking to leverage additional components of Novell Open Enterprise Server, including Novell iFolder® and Dynamic Storage Technology, to reduce storage costs.

Contact your local Novell Solutions Provider, or call Novell at:

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