

# Pleasanton Unified School District dramatically increases performance, reliability and security with Dell SonicWALL

NSA E7500 boosts bandwidth over 100 percent, cutting video uploads from 60 seconds down to 2 seconds



“Our uptime is 100 percent with the high availability and our bandwidth has increased over 100 percent.”

*Gary Hicklin  
Director of IT*



SonicWALL

## Customer profile



PLEASANTON UNIFIED SCHOOL DISTRICT

**Company** Pleasanton Unified School District

**Industry** Education

**Country** United States

**Users** 14,500

**Website**  
[www.pleasanton.k12.ca.us](http://www.pleasanton.k12.ca.us)

## Challenge

- Stateful first-generation firewalls
- Web-based education applications
- Rise in number of mobile device connections
- Constant port scanning

## Solution

- NSA E7500 Next-Generation Firewalls
- Dell SonicWALL Content Filtering Service

## Benefits

- Reassembly-Free Deep Packet Inspection
- Application Intelligence, Control and Visualization
- Integrated Content Filtering
- High Availability (HA)
- Easy administrative interface
- Outstanding support

Established in 1867, the Pleasanton Unified School District is a public primary and secondary education school district located in Pleasanton, California. The district serves approximately 14,500 students in nine elementary schools, three middle schools, two high schools and one continuation high school. In addition, the district offers adult education courses that are attended by hundreds of community members each year. The district recently replaced its Cisco® firewall infrastructure with paired Dell™ SonicWALL™ E-Class Network Security Appliance (NSA) E7500 Next-Generation Firewalls, resulting in increased bandwidth, enhanced performance, greater uptime and application intelligence and control.

“With the Cisco system, we were getting 40 MB, but as soon as we plugged in the Dell SonicWALL it was at 94 MB.”

Gary Hicklin  
Director of IT

**The challenge: upgrading stateful firewall to support high-performance web application usage and growing number of mobile device connections**

Internet access is an important part of Pleasanton school district’s curriculum.

“If you look at our logs, 90% of our Internet activity is curricular-based,” said Gary Hicklin, director of IT at Pleasanton Unified School District.

The district relies heavily on web applications like Skype™, Adobe® Connect™ and Google Apps™. Recently, Pleasanton has begun to standardize on Google Apps as a cost-effective alternative to Microsoft® Office.

“We think these applications can produce a better learning environment for our students and teachers and save a significant amount of money,” said Hicklin. “But this would be impossible to enable without a secure and stable Internet connection.”

Previously, the district had used Cisco firewalls, however, they did not provide the throughput the district required. In parallel, the district’s content filtering solution from Lightspeed Systems® was no longer meeting its needs.

“We really weren’t getting what you would expect out of our 100 MB of bandwidth,” said Hicklin. “During peak school hours it was more like 45 MB. The Cisco box just could not handle the bandwidth. We knew if we had a hardware failure, it was going to be a disaster.”

The increasing volume of mobile device traffic had also affected connectivity through the firewall.

“I think almost every student carries a smartphone, plus a laptop or smart tablet,” said Hicklin. “We see 1,200 mobile devices log on during a five-day school week.”

Security was another primary concern.

“There is constant port scanning,” said Hicklin. “Outbound traffic is also important. If a student brings in a laptop that is infected with a virus and starts spewing out spam, we could end up on somebody’s blacklist.”

To evaluate a replacement solution, the district engaged the assistance of CDW.

“CDW was able to jump right in and point out the problems we were having,” said Hicklin. “They were very helpful.”

The district evaluated solutions from Barracuda®, Fortinet® and Dell SonicWALL.

"We don't have the luxury of having one person focus on the firewall every day," said Hicklin. "The Dell SonicWALL administrative interface was quick to learn, simple to configure and easy to remember if we ever have an emergency."

#### **The solution: Dell SonicWALL NSA E7500 Next-Generation Firewalls**

The district chose to deploy paired Dell SonicWALL E-Class Network Security Appliance (NSA) E7500 Next-Generation Firewalls in High Availability (HA) mode. They also replaced their Lightspeed content filtering with Dell SonicWALL Content Filtering Service.

Featuring a dynamic rating and caching architecture, the solution blocks noncompliant and dangerous web content and enforces the district's productivity and protection policies. The district can configure and control content filtering from the NSA E7500, eliminating the costs of a separate dedicated filtering server.

"The reliability of Dell SonicWALL's high availability was important," said Hicklin. "Plus Dell SonicWALL gave us next-generation firewall, anti-virus, application intelligence and content filtering. This helps us meet CIPA compliance requirements with one easy-to-manage device."

Combining Dell SonicWALL Reassembly-Free Deep Packet Inspection® (RFDPI) technology with a multi-core platform, the NSA E7500 is configurable to analyze and control thousands of unique applications, whether unencrypted or encrypted with SSL. As an inline solution, the NSA E7500 leverages existing infrastructure while adding an extra layer of network security and visibility. As a security gateway, it adds secure remote access and high availability.

#### **The results: dramatic increase in performance, reliability and security**

The NSA E7500 Next-Generation Firewalls provide the district with application intelligence, control and visualization.

"We're getting a much better picture of what is happening on our network in real-time," said Hicklin. "Not only were we able to trace P2P traffic like BitTorrent, but we were able to tell it was going onto our wireless. Plus, we can control the use of proxies to bypass content filtering better than ever before."

The NSA E7500s have also enhanced network performance.

"Our uptime is 100 percent with the high availability and our bandwidth has increased over 100 percent," said Hicklin. "With the Cisco system, we were getting 40 MB out of our pipe, but as soon as we plugged in the Dell SonicWALL it was at 94mbps throughput of the 100mb pipe. Before, it would take 30-60 seconds for an instructor to bring up a YouTube video. Now they come up in 2 seconds."

Hicklin has been especially pleased with the support he has received from Dell SonicWALL.

"The Dell SonicWALL support team has been absolutely brilliant," said Hicklin. "They have gone out of their way to patiently walk me through problems and make sure we're doing things correctly."

The district has found the NSA E7500s to be a great improvement over their prior solution.

"The thing that really stands out to me is the improvement of our network environment," said Hicklin. "We are seeing who is attacking us when and at what times. That is a big deal for us."

"Before, it would take 30-60 seconds for an instructor to bring up a YouTube video. Now they come up in 2 seconds."

*Gary Hicklin  
Director of IT*

View all Dell SonicWALL case studies at [www.sonicwall.com](http://www.sonicwall.com)