Rock Valley College saves $20,000 a year by consolidating devices with Dell SonicWALL
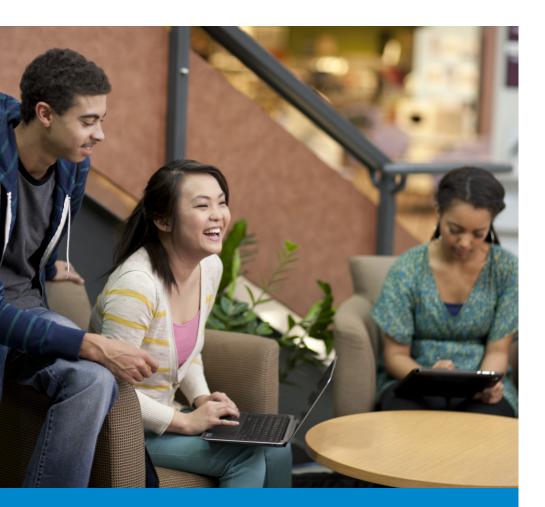
College reduces administrative overhead by 30 percent through replacement of five security devices with one NSA E8500. Using Analyzer, Rock Valley College enhances bandwidth for cloud services

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Tavis Alfredson
System Administrator
Rock Valley College

Institutional need
Rock Valley College needed to consolidate multiple point-solutions and eliminate bottlenecks in its emerging cloud-based environment.

Solution
Rock Valley College has increased bandwidth and security while significantly lowering administrative costs by deploying Dell™ SonicWALL™ E-Class Network Security Appliance (NSA) E8500 Next-Generation Firewall and Analyzer solutions.

Benefits
- Cut maintenance costs by $20,000 a year
- Reduced administrative overhead 30 percent
- Dramatically increased bandwidth for cloud services
- Identified and blocked illegal web traffic

Solutions featured
- Network Security
- Cloud Computing

Rock Valley College began experiencing bandwidth bottlenecks which impacted students and staff with slow and unresponsive Internet connections. Since the college lacked sufficient visibility into its network traffic, it was difficult to pinpoint the cause of the problem.

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"We were using 5 different appliances to secure our network, manage bandwidth and shape traffic, including Barracuda, FatPipe, Exinda, TippingPoint and a SonicWALL 3060 firewall," says Tavis Alfredson, system administrator at Rock Valley College.

"We initially tried to resolve the bandwidth problem by adding more Internet service providers, thus increasing bandwidth. However, it became clear that the real problem was the number of disparate devices on our network," says Alfredson. "Each appliance had to stop each packet, inspect it, approve it and pass it on. None of the devices talked well to each other. We could look into each product's interface, but we didn't have a holistic view."

Consolidating point products to optimize network security
New and emerging technology challenges compounded the issue.

"We had just built a cutting-edge technology building with 10 gig backbone and redundant switching," says Alfredson. "Demand for cloud-based services and app usage went up, and so did the connections on our network."

The college evaluated products from Fortinet® and Cisco® before selecting a Dell SonicWALL E-Class NSA E8500 Next-Generation Firewall solution.

"Fortinet customer service was unresponsive, and their pricing didn't help," says Alfredson.

"The E8500 had all of the functionality in the Fortinet and better price performance," says Tom Polak, system administrator at Rock Valley College. "And the Cisco was not user-friendly."

"The Cisco was all command-line," says Alfredson. "It would have taken significant training to switch over. We were already very comfortable with the standard SonicWALL interface. So we contacted Dell SonicWALL, having had excellent experience with their previous firewalls."

Alfredson was impressed with the NSA E8500. Designed for enterprise networks requiring full deep packet inspection protection and application control without compromising performance, the NSA E8500 combines tightly integrated intrusion prevention, sophisticated malware protection, and powerful application intelligence, control and visualization.

"The Dell SonicWALL demo just blew us away. To accommodate a growing number of students on campus, we had planned to adopt another ISP. Thanks to the E8500 that was not necessary."

Replacing five appliances while lowering costs
Rock Valley College deployed a consolidated solution using paired E-Class NSA E8500 Next-Generation Firewalls in High Availability (HA) mode. "We were able to eliminate five different

Technology at work
Software
Dell SonicWALL E-Class NSA E8500
Dell SonicWALL Analyzer
Dell SonicWALL TZ Series

DELL

appliances by consolidating our security services on the E8500," says Alfredson. "We realized we could achieve significant cost-savings on yearly maintenance and management of each firewall."

Deployment went smoothly.

"Dell SonicWALL's engineering team has an absolutely amazing response time," says Alfredson. "We had some issues with our firewall rules and our NAT. The engineers were able to get in and resolve it very quickly."

Rock Valley College has been able to significantly reduce its total cost of ownership.

"The economic climate has made cost savings a huge priority," says Alfredson. "By consolidating solutions with Dell SonicWALL, we are saving around $20,000 a year in maintenance fees. We spend significantly less time on administration. What used to take three administrators can now be done with two, and in one third of the time."

Getting a better return on bandwidth investment
The solution has boosted available bandwidth across the campus.

"People are extremely happy. Our Internet traffic is already 100 percent better," says Alfredson. "Dell SonicWALL Application Intelligence and Control simplified our ability to shape traffic."

The college is seeing a greater return on their bandwidth investment.

"We experienced unbelievable improvement in our bandwidth, and without increasing the number of our Internet service providers" says Alfredson. "A website that used to take 15 to 20 seconds to load now comes up instantly. Several departments have told us how much easier and faster it is to get a student through their FAFSA application process now. Before, traffic got bogged down by online shopping,

especially during the holidays. Now it seems to work better. It handles bursts of traffic."

The college is also using the solution to throttle potentially throughput-draining traffic, and discourage overuse.

"YouTube and Netflix buffer a lot in the beginning," says Polak. "We just slow down the buffering."

"We have made BitTorrent so slow that nobody wants to use it," says Alfredson. "For those who have valid reasons to use it, we allow them to do what they want via single sign-on."

Gaining deeper traffic insight with Dell SonicWALL Analyzer
At the same time, the college also evaluated Dell SonicWALL Analyzer, a web-based application traffic analytics and reporting tool that provides easy-to-use, real-time and historical insight into the health, performance and security of the network.

"We didn't even realize that Analyzer was something we needed," says Alfredson. "We installed it and, instantly, Analyzer discovered a serious illegal web traffic incident. We were able to verify and report everything our lawyers needed very quickly. Our police department has been able to use the reports several times since then. We have found it extremely useful being able to tie Internet history and traffic with specific users."

Analyzer supports Dell SonicWALL firewalls, backup and recovery appliances, and secure remote access devices, while leveraging application traffic analytics for security event reports.

"I use Analyzer as a forensics tool and log in every day," says Alfredson. "We look at the previous day's traffic to look for trends and uncover patterns in what's being looked at, and when.

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For instance, it can tell us which gambling sites are accessed the most. It's given me a heck of a browser list to go check on."

Analyzer helps the college gain granular visibility and control over its traffic.

"While faculty wants the academic freedom to explore everything, we still need to keep a check on what's going on and ensure compliance and safety," says Alfredson. "For example, a student in a human sexuality class might have a valid reason to go to a website that might otherwise be restricted. Analyzer helps us to make those intelligent distinctions. The reporting from the E8500, both live and through Analyzer, is just amazing. It has significantly lightened my workload."

Building a future in the cloud
Going forward, the college is relying upon the Dell SonicWALL solution to support its cloud-based initiatives.

"We are looking at Office 365 and will be moving our Exchange server to the cloud," says Polak.

"We also have departments that offer cloud-based research services," says Alfredson. "Cloud-based services are utterly dependent on our internet connection. So, their success is a direct tie-in to the E8500."

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