

# The Pennington School



SteelCentral NetExpress helps private school use cloud-based learning as competitive advantage to increase enrollment

## Company description

Founded in 1838, The Pennington School is an independent, coeducational school serving day and boarding students in grades six through twelve. On the 54-acre campus, 100 faculty members teach 485 students (85 in middle school, 400 in the upper grades). The enrollment figures include 120 boarding students, half of which are international.

## In Brief

### Challenges

- Network performance is critical to the classroom experience
- School acts in place of parents, so must monitor Internet use
- Hybrid IT environment complicates troubleshooting

### Solution

- SteelCentral NetExpress all-in-one network monitoring appliance for packet capture, flow data collection, analytics, dependence mapping and reporting

### Benefits

- Troubleshooting in hybrid environment takes minutes, versus days or hours
- IT team can now spend more time on higher-value projects
- Network issues uncovered before they affect performance and user experience

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## Challenge: The classroom experience is dependent on the health of the network

The Pennington School is at the forefront of the growing movement to use technology to facilitate and improve the educational experience. Every Pennington student uses an iPad—for everything from reading textbooks, to taking notes and doing homework, to communicating with teachers and classmates, to doing research, and even to extracurricular activities such as working on the school yearbook and communicating with friends and family back home. All faculty members have iPads, too, which they use in many ways to enrich their lessons and interactions with students.

This puts a huge responsibility on the school's IT department, led by Director of Technology Kenneth Coakley, to keep the network running flawlessly. "The network's performance is really integral to the overall classroom experience," Coakley explains. "If a teacher wants to bring something up on a screen and it's spur of the moment, for example, but can't do it because there's something wrong with the network, then we have failed." Coakley also notes that the school acts in loco parentis in the case of boarding school students, and in that role, the IT department needs to be aware of what students are doing on the Internet.

Pennington School's IT environment is a hybrid of owned applications and cloud-based services. Administrators primarily use internally hosted applications such as Microsoft Office and Blackboard school administration software (Education Edge, Raiser's Edge). But the trend is definitely toward the cloud, particularly for the learning tools used by students and faculty, says Bryan Bentley, an IT admin at the school. "When I started we had more

local installed software, but now it's heavily leaning on cloud-based apps," he says.

For basic computing tasks, students and faculty use cloud-based Google Apps for Education (Gmail, Google Drive, Google Docs, etc.). They use the Schoology learning management system to create, share, and manage academic content. The departments use a variety of subject-specific cloud apps, such as Subtext from Renaissance Learning, which is used by the English department to facilitate discussions about books.

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"SteelCentral NetExpress allows us to move from that mode of putting fires out to really planning and making improvements to the infrastructure. It really gives us the freedom to move the school forward with other projects."

Kenneth Coakley  
Director of Technology, The Pennington School

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Since none of these apps are available if the network is down, Coakley and his team started looking into ways to get better visibility into network performance. "We knew we needed to get a tool in-house to help us keep the network as healthy and efficient as possible," says Coakley. "So we started looking for a solution that would help us better monitor our network and be proactive with any networking issues before they arrived."

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## Solution: Riverbed SteelCentral NetExpress

The school's IT solutions provider, ITsavvy, led them to Riverbed® SteelCentral™ NetExpress. An all-in-one appliance for network performance management, SteelCentral NetExpress combines packet capture and flow data collection with analytics, dependency mapping,

and reporting so IT teams can identify, diagnose, and troubleshoot problems across applications, networks, and infrastructure. The SteelCentral family is part of the Riverbed Application Performance Platform™, the most complete platform for location-independent computing.

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“Network performance management was new to us, so we were really relying on ITsavvy,” recalls Coakley. “We have a long-term relationship with them and they have a good sense of our needs. When our sales rep said, ‘I need to show you this Riverbed technology. I think it’s perfect for you,’ that carried a lot of weight with us.”

The Pennington School evaluated one other solution in addition to the Riverbed appliance. “There’s no question that it wasn’t in the same league as the SteelCentral NetExpress,” says Bentley. They also performed a proof-of-concept (POC) of the SteelCentral NetExpress, and

Coakley credits Riverbed with the success of that. “This was something new to us and I think we could have been easily overwhelmed with the tool had it not been for their assistance,” he says. “That was a huge selling point for us.”

Even during the POC, they saw the value of SteelCentral NetExpress. “It allowed us to uncover some things we didn’t know were happening, such as the fact that some students were using proxy services to bypass our firewall,” explains Coakley.

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## Benefits: A scalpel not a sledge hammer for resolutions in minutes instead of hours or days

With SteelCentral NetExpress, Pennington School’s IT department has a tool that allows them to “isolate, track down, and pinpoint where we need to focus,” says Coakley. They can now take what Bentley says is “more like a scalpel as opposed to a sledge hammer approach” to troubleshooting network performance issues. “We can easily pinpoint the cause and get right to it,” Bentley says.

As a result, troubleshooting takes much less time than it did in the past, and IT can be proactive in ways they couldn’t previously. In the example of the students bypassing the firewall (to play a game), the IT team found out about it when only a few students were involved, so it hadn’t started to affect network performance. “But let’s say we hadn’t uncovered that. A week or two weeks later, 30 or 40 students could have been doing the same thing and we could have had real problems,” explains Bentley. “That would have taken a lot of scrambling to really figure out what was causing the problem, and how we could stop it. This way we got it before it was even a problem.”

He estimates that without SteelCentral NetExpress, trying to solve a problem such as that would have taken hours and possibly days. “With SteelCentral, it took us 15 minutes to find this problem and put a stop to it,” Bentley adds.

Having the SteelCentral NetExpress appliance is also helping eliminate the “blame the network first” mentality. “That was a general thing that happened more frequently than I was comfortable with,” says Coakley. “Now when somebody reports a problem, we can track back and get a better feel for where things are failing, either internally or outside of our domain. And when it’s not something local to our network, we can repoint the finger.”

SteelCentral NetExpress also gives the IT team time to focus on more important things. “It allows us to move from that mode of putting fires out to really planning and making improvements to the infrastructure,” says Coakley. “It really gives us the freedom to move the school forward with other projects.”

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Brian Bentley  
IT Admin , The Pennington School

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## Summary

Students and faculty at The Pennington School use so many cloud-based apps that when the school's network is down, many learning activities stop. The school's IT department wanted better visibility into the network so that they could be proactive in resolving issues before they affected network performance.

By using a SteelCentral NetExpress all-in-one network monitoring appliance, the school's IT department uncovers most network issues before they affect students or teachers. They find that troubleshooting now takes only minutes, versus hours or days in the past, even in the school's hybrid environment. SteelCentral NetExpress lets the IT team spend more time on higher-value projects.

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### About Riverbed

Riverbed Technology, Inc. enables organizations to modernize their networks and applications with industry-leading SD-WAN, application acceleration, and visibility solutions. Riverbed's platform allows enterprises to transform application and cloud performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. At more than \$1 billion in annual revenue, Riverbed's 28,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at [riverbed.com](https://riverbed.com).

The Riverbed logo consists of the word "riverbed" in a bold, lowercase, sans-serif font. The letters are a vibrant orange color.