



# The Great IP Convergence

## How Vermont's Lyndon Institute Leveraged ENA's Broadband, Wi-Fi/LAN, and Voice Services to Build a Seamless and Robust Infrastructure

Located in the scenic Northeast Kingdom of Vermont, Lyndon Institute is a comprehensive day and boarding school for grades 9–12. Offering a student-to-teacher ratio of 12:1, Lyndon Institute provides an exceptional educational experience for its students that leads to a lifetime of learning and good citizenship. The school's 200-course curriculum—plus 19 Advanced Placement courses—provides opportunities to study core honors academics, fine and performing arts, and career and technical education.



### Rebuilding From the Ground Up

With a dedicated focus on providing its students access to 21st century learning opportunities, Lyndon recently made the decision to enhance much of its existing infrastructure to meet its students' escalating technology and communication needs. "We were having a lot of problems and outages with many of our older technology platforms, especially with our wireless network," shares Lyndon's Director of Information Services Dan Fales. "Our users were not having a consistent experience, which really hindered our students and faculty from integrating technology into their coursework. Many of our faculty members returned to using pen and paper because they did not feel confident that wireless access would be available.

At one point, we had to relocate our students to other areas of the building to access the Internet. This was very disruptive to the learning process and not at all what we envisioned for our students."

After spending a semester fixing glitches in Lyndon's wireless network, Fales and the Lyndon team decided to explore other Wi-Fi network service options. At the same time, many of the school's other technology platforms were at their end-of-life cycle and in need of repair. "Given the option, I would not have revamped our entire infrastructure in one fell swoop," shares Fales. "We had various services leased out to other companies, and pretty much everything needed to be changed out, including our VoIP service."



## Selecting a Trusted Partner

With a tight implementation timeframe, Fales looked to ENA—the school’s managed Internet service provider— for assistance. “I knew that I wanted to go in a different direction when selecting new Wi-Fi, VoIP, content filtering, and firewall services for our school,” says Fales. “The companies we’d been with before were very large, and it was easy for us to get lost in the queue. I was interested in ENA because they are a managed service provider that specifically serves schools. I wanted a provider that could manage our infrastructure and various technology platforms because my team’s main focus needs to be on education and supporting the integration of instructional technologies. A lot of companies offer infrastructure support, but there are not many companies like ENA that help you address your specific educational needs.”

Overhauling an entire infrastructure is not an easy task, but Lyndon simplified the process by choosing to converge its technology platforms using ENA’s Infrastructure as a Service (IaaS) solutions. Over the course of just a few weeks, Lyndon deployed the following services:

- **ENA Air, ENA’s managed turnkey Wi-Fi service**
- **ENA SmartVoice, ENA’s fully redundant interconnected VoIP service**
- **ENA WebSafe, ENA’s content filtering solution**
- **ENA NetShield, ENA’s firewall solution**

Additionally, Lyndon doubled its ENA-provided bandwidth. Fales opted to deploy ENA’s IaaS solutions because ENA’s service model aligned with his goals. “The learning environment is changing,” says Fales. “My team needs to focus on supporting instruction rather than troubleshooting and fixing our Wi-Fi. We recently switched to a new student information system. That has been a time consuming project and has required a lot of coordination. We would not have been able to deploy that system if we had not just completed the ENA project. Having ENA manage our Wi-Fi, VoIP, firewall, and content filtering has enabled us to shift our focus to supporting our teachers and dedicating more time to completing big integration projects like our new student management system.”

## 21st Century Learning at Its Best

Lyndon’s students, teachers, and administrators are enjoying the perks of having a robust infrastructure in place. ENA Air’s ubiquitous access enables students to use their devices anywhere on Lyndon’s campus. “Prior to the switch, a lot of teachers were frustrated with our spotty coverage, and they were losing confidence in the technology,” says Fales. “Now, I’m seeing students and teachers using their devices again because we have reliable Wi-Fi in place for them.” For Fales, ENA Air has enabled him to get back into the classroom. “I’m teaching two film classes now. I was also able to teach a three-week, project-based learning course during our school’s January term. I would not have time to teach—something I greatly enjoy—if I still had to internally manage our Wi-Fi network.”



ENA SmartVoice VoIP solution has also been well-received by the school district. Lyndon’s previous phone system was outdated and in need of significant repair. “Our VoIP implementation was seamless,” says Fales. “We didn’t need to do any significant training with our faculty or staff. We just sent them some cheat sheets. It was a very smooth transition. We’ve really enjoyed ENA SmartVoice’s online user portal. We didn’t have that type of feature with our previous phone system. It enables us to make changes very quickly.”

## Lessons Learned

Building an enterprise-grade infrastructure is an ambitious endeavor for any district, but completing the project in just a few weeks is a significant undertaking. Fales is extremely happy with the end result, but he does have some words of advice for those considering restructuring their technology platforms. “I’d recommend doing your research and identifying your long-term goals,” says Fales. “Each company is going to be different. Having ENA

manage everything was a great decision for us. That was most apparent in the implementation stage. We originally planned on using another provider for one of our new services, but they couldn't accomplish what needed to be done in our timeframe. Luckily, ENA was able to step in and help us with that service as well. It quickly became clear that we should have used them from the beginning for everything."

Having a reliable partner you can count on during any significant transformation is critical. "ENA has been right there when we needed them," says Fales. "Whenever we've had their team on-site it has been productive and effective. They've been very responsive and helpful throughout this entire process."

### Looking Forward

Looking forward, Fales is confident his school's new Wi-Fi network will effectively scale to meet the growing needs of his students and teachers. He anticipates the learning environment will continue to change, with more ubiquitous, anytime/anywhere learning opportunities replacing the traditional classroom pedagogy.

"I anticipate that the instruction will become very decentralized," says Fales. "I think there will be a lot more flexible learning pathways for students. For IT, that means increased Internet speeds, more cloud computing, and—somehow—the provision of home Internet access because there are some students that still don't have access in their homes."



ENA has had the honor of partnering with innovative and ambitious schools like Lyndon for the past 20 years. We are excited to play a part in providing Lyndon's students with a more seamless and secure online learning environment. We look forward to seeing firsthand the positive outcomes their digital transformation produces!



All photos courtesy of Steve Legge

### CONTACT US TODAY!

For more information about ENA, contact your ENA account service manager or visit our website at [www.ena.com](http://www.ena.com).

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### ABOUT ENA

ENA is the leading provider of infrastructure as a Service (IaaS) solutions to schools and libraries. In 1996, ENA created one of the first statewide K-12 networks in the U.S. and has earned a reputation as experts in the design, deployment, and management of broadband, Wi-Fi/LAN, voice, and video solutions. Today, ENA manages multiple statewide and district-wide networks, including 15 of the largest school systems in the country, successfully serving approximately 5,000 end sites; 570 school districts; 3.2 million students, teachers, and administrators; 280 libraries; and 3.2 million library patrons. For more information, please visit [www.ena.com](http://www.ena.com) or call 866-615-1101.