Central New York schools are receiving better IT support at a lower cost with FlexPod

The Central New York Regional Information Center (CNYRIC) serves 50 school districts and four Boards of Cooperative Education Resources (BOCES) across eight counties in central New York. CNYRIC maintains a massive fiber-based WAN and provides a wide array of technology services that work toward one common goal: improving student learning. For more information, visit CNYRIC.org.

**Challenges**
- Expand IT support across 50 school districts with a capped budget
- Transition from a technology procurement model to a service delivery model
- Improve IT standardization and governance without inhibiting district autonomy

**Solution**
- FlexPod converged infrastructure, featuring:
  - Intel® Xeon® processor-based Cisco Unified Computing System™ (Cisco UCS)
  - Cisco UCS Director
  - Cisco Nexus® switches
  - NetApp storage

**Results**
- Dramatically reduced the cost of technology delivery and support
- Improved infrastructure standardization, management, and scalability
- Helped districts shift from systems administration to education improvement

For more information, visit [cisco.com/go/flexpod](http://cisco.com/go/flexpod)
Challenge: Reduce technology sprawl, inconsistency, and cost

As a former school IT manager, Larry Luke knows how hard it is to build and maintain technology systems at the district level, where resources and budgets are finite. He understands the push for district-driven decision making and the pull of state-driven assistance. And he is well aware that old models don’t always work in the new world of technology and teaching.

Now the Director of Technology for CNYRIC, Luke is using that knowledge to better support the IT needs of 50 school districts in Central New York.

“The role of technology in education has expanded greatly in a short amount of time,” Luke says. “We’ve all had to adapt.”

Until recently, the relationship between CNYRIC and its districts was primarily transactional in nature. CNYRIC employees would help acquire and install technology systems and attain state-sponsored rebates, but managing and maintaining the systems remained the responsibility of the districts. With a shortage of IT specialists in many of the districts, an increasing amount of technology to manage, and a new state law that placed a hard cap on education spending, the model was quickly becoming unsustainable.

“It was turning into the Wild West,” Luke recalls. “We had too much technology sprawl, too much inconsistency, and not enough resources or budget to manage it all.”

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Larry Luke  
Director of Technology, CNYRIC
A new model

CNYRIC leaders needed to deliver better IT support at a lower cost. They wanted more standardization and easier scalability. And they envisioned a true balance between technology governance and district autonomy.

“To provide better support and take the workload off of the districts, we knew we needed to deliver and manage IT services centrally,” says Luke. “We needed a new model.”

That’s why CNYRIC adopted FlexPod—the industry-leading converged infrastructure platform that incorporates the latest technology advancements from Cisco and NetApp—and is shifting its focus from technology and resource procurement to full service delivery.

“We chose FlexPod for a number of reasons,” Luke says. “Standardization and stability were high priorities for us. We wanted the ability to expand and customize the system over time. And we placed a high value on single-call support.”

CNYRIC now provides two infrastructure as a service (IaaS) offerings—one that’s fully managed and another that allows district staff to administer their own server environment. Both come with 25 virtual machines (VMs) and 10 TB of storage, delivered through CNYRIC’s high-speed WAN and private cloud.

“These districts have more staff and want to manage their own VMs and Windows Server environments,” Luke explains. “With FlexPod, we can allow self-service provisioning and customization at the district level without impacting our overall standardization or governance efforts.”

Huge cost savings, much better support

According to Luke, the IaaS offerings give the school districts much better technology and support at a fraction of the cost of alternative options. Instead of paying upfront for server, storage, and networking systems, stitching them together, attempting to maintain them with overburdened IT specialists, and starting over when the systems reach end of life, the districts can now get a full infrastructure environment and support team for a fixed annual fee.

“It represents a huge cost savings for the districts,” says Luke. “The services include hardware, software, and extended hours of support, which allows the districts and their IT specialists to shift their focus from infrastructure management to education improvements.”

Luke and four senior network administrators manage the IaaS offerings and FlexPod environment, which includes four blades, three storage area networks, and 180 VMs. The team splits shifts so they are available to help the districts as needed from 7 a.m. until 10 p.m. on weekdays. Luke says FlexPod is so stable and easy to manage that his team is now providing “second level support” to the districts.

“We’re able to help on a deeper, more proactive level,” he explains. “We can help with things like desktop management or imaging. We can monitor the network and prevent problems before they happen. And if something goes wrong, we can troubleshoot remotely.”

Two domain controllers in one of the school districts crashed recently on a Friday night. If the district had not been using one of CNYRIC’s IaaS offerings, the crash would have gone unnoticed until Monday morning and disrupted district operations and student learning. With the new IaaS model, however, Luke’s team was able to detect the crashes and fix them before the district was even aware a problem had occurred.
Looking ahead

Eleven school districts have already adopted CNYRIC’s new IaaS offerings. Eight are using the full-service option, three are using the self-provisioning option, and more will make the transition as their hardware systems age. With adoption growing, Luke is thankful to have a reliable, standardized environment that is easy to manage and scale.

“We’ve already expanded once, and we’ll do it again this summer,” he says. “Adding more memory capacity, a fourth blade, and two drive trays for storage took less than a day. It was seamless.”

Like true service providers, Luke and his team are already discussing new ways to improve the IaaS offerings. Becoming a backup and disaster recovery target for the districts, expanding remote management, and enabling additional customization are all being considered.

“The chaos of the past—where we were juggling a mix of technologies, resources, budgets, and one-off requests—is being replaced by two all-inclusive services with set fees,” says Luke. “The districts get more than they’ve ever received at a lower cost, and we’re able to implement and support additional standardization, reliability, and scalability across all of our districts. Everyone wins.”

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