



CASE STUDY

Creating a Secure Network to Support an Interconnected School System



The Connecticut Technical Education and Career System (CTECS) is a statewide system of 17 public high schools and a technical education center in Connecticut. It provides high school students with a comprehensive academic and advanced trade/technology curriculum, allowing them to gain skills and certifications in various career fields while earning a high school diploma.



The challenge: A Secure and Reliable Connectivity Solution

The Connecticut Technical Education and Career System (CTECS) operates 17 technical high schools, making it the largest high school system in Connecticut, serving over 11,000 students. Despite the state's allocation of funds, the school system faced a significant challenge: it lacked the network engineering talent necessary to design, build, and manage a network that could interconnect its high schools. This gap in expertise threatened the ability of CTECS to provide a modern, interconnected educational environment for its students.

The absence of skilled network engineers meant that CTECS was unable to leverage the allocated funds effectively. Without a robust network infrastructure, the high schools were at risk of falling behind in terms of technological advancements and connectivity. This situation posed a significant barrier to the school's mission of providing high-quality technical education and career training to its students.

Furthermore, the lack of a cohesive network system hindered communication and collaboration between the schools. It prevented the sharing of resources and best practices, which are essential for maintaining a high standard of education across the system. The challenge was not just about building a network but ensuring that it was secure, reliable, and capable of supporting the diverse needs of the students and staff.

The solution: Providing a Superior Experience for Students and Staff

To address this challenge, C1 stepped in with a comprehensive turnkey solution. The solution included a Juniper Networks routing infrastructure and Palo Alto Networks-based cybersecurity measures. This robust combination ensured that the network would be both secure and reliable. Additionally, C1 facilitated the migration from another system to Aruba for WIFI and Juniper for switching, ensuring that all business operations were streamlined through IPC/C1.

To address the technical resource gap, an implementation team was established. This team was led by a C1 project manager who worked closely with each member of the CTECS IT staff. The collaboration ensured that the project was executed smoothly and efficiently. The project manager's expertise and hands-on approach were crucial in guiding the IT staff through the implementation process, providing them with the necessary support and training.



The management platforms integrated into the design allowed the existing Tech Center IT staff to monitor and manage the system effectively while maintaining staffing limits. These platforms provided the necessary tools and capabilities to ensure the network's reliability and security, empowering the IT staff to take control of the network. This comprehensive approach not only addressed the immediate technical challenges but also positioned CTECS for future growth and innovation.

The result: Transforming CTECS: IT Staff Empowered with Modern Network Management

The implementation of this solution not only bridged the technical resource gap but also empowered CTECS to create a secure and interconnected school system. This transformation allowed CTECS to enhance its educational offerings and provide a superior experience for both students and staff.

The management platforms integrated into the design allowed the existing Tech Center IT staff to monitor and manage the system effectively while maintaining staffing limits. These platforms provided the necessary tools and capabilities to ensure the network's reliability and security, empowering the IT staff to take control of the network.

As a result, CTECS was able to offer a modern, interconnected educational environment that supported its mission of providing high-quality education and training to its students. The successful implementation of this solution not only addressed the immediate technical challenges but also positioned CTECS for future growth and innovation.

Ready to Transform Your Campus Connectivity?

Join leading education institutions in revolutionizing the learning experience with advanced network solutions. Contact us today to learn how we can help your institution achieve seamless connectivity and future-ready infrastructure.

Talk to an expert: <https://www.onec1.com/contact-us>



C1 designs and delivers technology solutions built for outcomes. We focus on communications, networking, and cybersecurity—pairing leading partner platforms with our advisory, professional, and managed services to make modernization practical, secure, and valuable from day one. Where others talk about transformation, we make it real—faster, simpler, and more resilient. Learn more at [onec1.com](https://www.onec1.com).