CASE STUDY

VoltServer Powers Westfield Public Schools

Industry
Fault Managed Power
Intelligent Buildings

Solution
Digital Electricity™

Introduction

Westfield Public Schools, nestled in the heart of Westfield, NJ, is unwavering dedicated to using state-of-the-art enterprise technology to elevate its educational landscape. Contrary to traditional views, the district has proactively adopted innovative infrastructure solutions to streamline its IT services, cut costs, and support the safety and security of its students and staff. This bold embrace of innovation is a testament to the district's unwavering dedication to progress and excellence.

Project Overview

The Facility

Westfield Public Schools, with ten distinct buildings managed by a unified IT services team, has implemented a smart, converged infrastructure to meet its diverse technological needs. This infrastructure powers many IoT edge devices crucial for day-to-day operations, including Wi-Fi access points, surveillance cameras, IP phones, door controllers, and energy-efficient lighting systems.

The Challenge

While adopting Power over Ethernet (PoE) technology facilitated easy device management and deployment. It introduced a significant challenge during power outages. The reliance on PoE switches meant that all edge devices would lose power during such events, potentially compromising the security and safety of individuals within the school premises.

The Solution

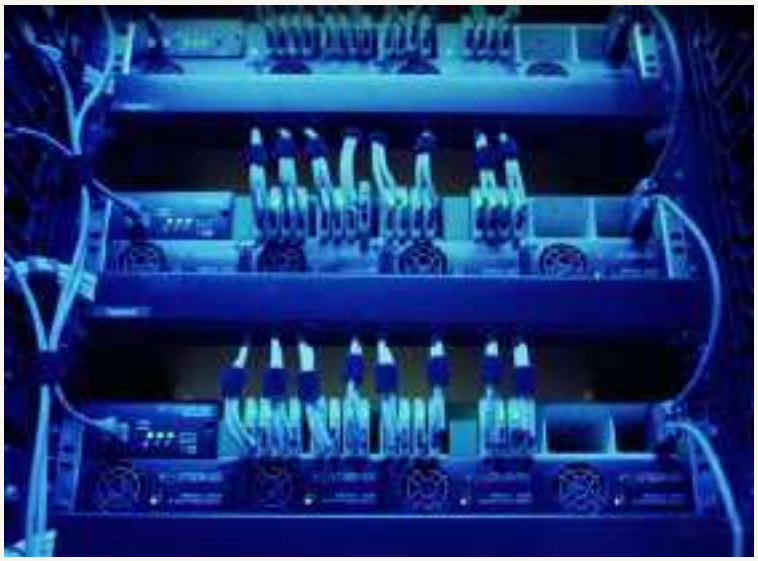
Recognizing the critical challenge posed by power outages, the district embarked on a comprehensive project in 2018 to install emergency generators at each school. However, to support these generators, the addition of uninterruptible power supply (UPS) systems and electrical circuits in IT closets was necessary to maintain PoE network switches during power outages. While traditional UPS solutions were deemed complex, costly, and space-intensive, a more efficient alternative was sought, leading to the adoption of VoltServer's Digital Electricity technology.

> "VoltServer is one of the top vendors that we have ever had the pleasure of working with."
>
> Brian Auker, Westfield CTO

IMPLEMENTATION DETAILS

Distance Considerations

Implementing local UPS systems in 40 IT closets would have introduced maintenance complexities and space constraints. Moreover, the heat load generated by UPS units posed additional challenges to the environmental conditions within the IT closets.



Installation and Training

Recognizing the need for a solution that its in-house technology staff could efficiently maintain without relying on external contractors, Westfield sought a partner to deliver both innovation and reliability. VoltServer, the leader in Digital Electricity technology, emerged as the preferred choice, providing a safe, reliable, and energy-efficient power solution at a fraction of the cost of conventional UPS systems.

Results and Future Expansion

With the implementation of Digital Electricity technology, Westfield Public Schools has reaped significant benefits. The system's centralized architecture eliminated the need for dedicated UPS units in every IT closet, reducing complexity and space requirements. More importantly, the system's flexibility allows for the prioritization of power distribution during outages, ensuring the continued operation of safety-critical devices. This innovative solution has not only addressed the district's power backup needs but has also paved the way for future expansion and technological advancements, instilling a sense of pride and confidence in the district's forward-thinking approach.

Conclusion

Through strategic collaboration with VoltServer and the adoption of Digital Electricity technology, Westfield Public Schools has addressed its power backup needs and laid the foundation for a more resilient and efficient infrastructure. This partnership underscores the district's commitment to leveraging innovative solutions to enhance educational experiences while minimizing costs and operational complexities.