

CASE STUDY: MAHWAH TOWNSHIP PUBLIC SCHOOLS DISTRICT

LTW leverages Genetec Security Center to Create IP-Based Security Network and Provide Mahwah Schools Advanced Security, Peace of Mind

SUMMARY

- The Mahwah Township Public Schools' Manager of Information Technology (IT) chose LTW for its wireless and security networking expertise and prior successes with other New Jersey school districts.
- The Manager of IT wanted to capitalize on the high bandwidth, long-term savings from IP-based networking technologies to meet current data demands and satisfy future growth.
- LTW provided a scalable enterprise class solution, designing the district's security network around Genetec Security Center, an industry-leading IP security surveillance system that also simplifies security operations.
- LTW provided a sophisticated and innovative solution, as Security Center integrates video surveillance and access control systems for more effective monitoring, greater efficiency, and an over-all higher level of security.
- On-going system designs and upgrades preserve legacy-system technologies, minimizing the school district's budget outlay and extending its return on investment.

Challenge: Ensuring Security in an Unsecure World

The need for enhanced security in today's school environments has never been greater because, with incidents across the country leading the news, you never know what the next threat looks like, nor can you calculate the potential for harm.

Gone are the days of simply locking doors or simple intercom/camera systems to identify and allow authorized persons entry into the school. Today's security needs pose several challenges:

- The rapid pace of technology advances makes it difficult to avoid obsolescence and achieve maximum return on investment
 - School budgets are notoriously tight and any technology solution needs to provide significant value relative to price and be flexible to grow over time
 - It's unrealistic to expect teachers and staff to watch over every student throughout the day or after school hours
 - It is not economically feasible or practical to hire additional staff to help watch over all areas of the school's buildings and grounds

The Mahwah school district is home to six schools with an enrollment of more than 3,400 students. The district is spread out over seven locations – one high school (with two auxiliary buildings), one middle school, four elementary schools, and one administration building. The Manager of Information Technology at Mahwah, Carlos Rosa, oversees security operations at all of the district's locations.

While the topic of security can open checkbooks in even the tightest school budget, simply throwing money at the issue by adding cameras and network servers isn't the answer. Mr. Rosa recognized that security and networking technologies are continuously evolving, and he saw the value of putting his needs in the hands of the experts: LTW.

Background: Finding the Right Partner, Laying the Foundation

Mr. Rosa began working with Pine Brook, NJ-based systems integrator LTW in 2006, to enhance and improve the district's then current security system. Mr. Rosa chose LTW for its considerable wireless and security networking expertise coupled with its extensive experience working with other New Jersey school districts.

Together, Mr. Rosa and LTW customized a then-advanced security system for the Mahwah Township Public Schools:

- Approximately 25 analog cameras were mounted in the high school with another 14 mounted in the middle school
- The cameras were all tied into a local closed circuit television (CCTV) system
- Access control systems were installed at the middle school and high school front doors to permit/restrict access



While the initial camera deployment satisfied the school district's security requirements, the CCTV and access control systems did not operate on the same platform. A secondary communications infrastructure operated in parallel to the existing network, a setup that negated some of the system's operating efficiencies and added costs.

Aware of these shortcomings, Mr. Rosa set his sights on creating a "future-proof" security system, one that could sufficiently handle current data use and grow with the district.

Solution: A Unified IP-Based Security System

Together, Mr. Rosa and LTW customized a then-advanced security system for the Mahwah Township Public Schools:

- A Web-based system that would link all computers and devices into a centrally held storage server instead of requiring local systems at each location
 - A networked solution designed for scalability and growth that would integrate with the school district's existing network
 - A much more sophisticated access control system offering a deeper level of integration with its video surveillance solution

LTW implemented a wireless security network featuring the robust Genetec Security Center platform. Among the most reliable and easy to use IP-based security systems, Security Center features Omnicast IP video

management software for video surveillance and the Synergis IP access control system for real-time monitoring of access events and cardholder activity.

The open architecture of Genetec's Security Center enabled Mahwah to leverage its earlier security networking investments by:

- Incorporating the existing analog cameras into the new system via IP encoders
- Repurposing the access control hardware by replacing only a small number of components with compatible hardware
- Adding a new HP server to Security Center's two legacy servers, increasing storage capacity from between 1 and 2 terabytes to between 11 and 12 terabytes and allowing the school district to archive up to 30 days of video versus the previous 3 to 4 days

LTW installed new IP cameras in hallways and other high traffic areas at the high school, increasing the number of protected doors to six, while four additional cameras were added to protect the indoor passageways at the middle school.

Security Center's Web-based software eliminates the need to install software on every user's computer, allowing for a faster and easier rollout. Authorized users can monitor the system from anywhere, including handheld devices, greatly improving convenience and response time. The Township also issued access cards to law enforcement personnel, ensuring that in the unlikely event of an emergency or security issue, officers would have authorized access to the buildings.



Results: Built for Today, Designed for Tomorrow

Genetec's Security Center provides Mahwah Township Public Schools a dependable security safety net.

Surveillance cameras monitor all corners of the Mahwah campuses, including school and bathroom entrances, hallways and stairwells, cafeterias and gymnasiums to ensure the safety of its student body by:

- Guaranteeing that only relevant people can get on campus
 - Monitoring after-hours recreational activity for physical safety
 - Discouraging theft and vandalism
 - Concretely resolving who-did-it issues between students and keeping lunchtime under control

"LTW has been a trusted partner, with friendly and knowledgeable management, engineers and support staff that really seem to care about my network infrastructure as much as I do. Whereas other integrators had their eye on our budget, LTW is helping us preserve our limited resources so we can continue to grow in order to protect our student body the best we can."

-- Carlos Rosa,
Manager of Information Technology
Mahwah Township Public Schools

Security Center's combined video surveillance and access control system gives administrators the ability to watch an individual walking down a hall and through a door while simultaneously retrieving his/her identification details from the access control swipe.

- **The sophisticated access control system** has greatly improved the system's overall efficacy, eliminating the need to switch between user interfaces or spend critical time identifying which door corresponds with which camera.
- **The advanced camera technology** provides improved image quality, including HDTV video, and adds a greater level of situational awareness with embedded features such as motion detection, digital pan/tilt/zoom (PTZ), and camera-tampering alarms.
- **User profiles can be tailored** so that, for instance, officers and school principals have only limited access to video feeds, whereas administrators are allowed unrestricted access to all video feeds.
- **Remote access is saving costs** on service visits, as LTW can routinely monitor and access the system when needed from its Pine Brook offices to address any minor issues.



"Genetec's Security Center is an excellent fit for school systems because it covers everything you can possibly need, without requiring full feature commitment up front. Schools require the ability to purchase features piecemeal as funds and needs arise, but only a unified system like Genetec's will allow all newly acquired devices and features to dovetail precisely when the time is right to bring them to the table."

--Carlos Rosa

Mr. Rosa continues to work with LTW on system upgrades and enhancements in order to keep the network current and one step ahead of the district's dynamic and evolving needs. Since the 2010 upgrade, LTW has successfully upgraded and expanded the school's network to capitalize on the latest technology advancements.

The next step is to take the system virtual. Thanks to Mr. Rosa's "future-proof" vision, LTW's integration expertise, and Genetec's open technologies designed to scale, the present Mahwah Township Public Schools' security network infrastructure is ready for the next evolution.

Genetec: Industry Leaders in IP Video Surveillance

In 1997, Genetec pioneered the first-ever IP video management software and continues to lead the industry. Its flagship product, Security Center, unifies IP-based video surveillance, access control, and license plate recognition into a single, easy-to-use, easy-to-manage platform.

The open architecture and advanced level of unification possible in Security Center allows customers to consolidate information from multiple sites and various sources into a centralized management location, greatly enhancing day-to-day monitoring and reporting activities.

Genetec was founded on the principle of innovation and remains at the forefront of emerging technologies that unify physical security systems.

The LTW Advantage: Beyond Security and Wireless Networking Expertise, a Team you can Trust

LTW is a leading systems integrator, specializing in network, wireless and security technologies and providing turnkey solutions to its customers.

LTW has partnered with numerous New Jersey school districts to create multifaceted integrated security systems that satisfy the availability, reliability and scalability requirements of today, and are poised to grow in the future. A vendor-agnostic systems integrator, LTW has strong relationships with the leading wireless and security technology manufacturers and distributors so they can continue to deliver the most cost-effective solutions unique to each customer.

The dedicated LTW staff offers customers decades of experience installing end-to-end security applications that incorporate the latest high-definition digital and IP-based cameras, high-capacity digital video recording systems, and wireless communications into the data network.



"Carlos Rosa has a vision for keeping the Mahwah schools secure, and we're happy this vision continues to include LTW. Our relationship has been successful for so many years because Carlos knows what he wants and trusts that we can create and deliver networking security solutions that will scale and adapt to changes coming five years down the road."

-- Richard Adams, Senior Account Manager
LTW