



A **BELDEN** BRAND



## Student-Grade Mobility

Connecting the Digital Generation

**The challenge.** As the industry with the most widespread demand for wireless networking, education places some of the greatest demands on WLAN solutions. IT professionals know that the products they choose must meet stringent requirements for seamless mobility within and between campuses, must support large numbers of simultaneous users in the same place, and address the growing pressure to securely support virtually any Wi-fi enabled device, and more than one per person.

At Trapeze Networks, we are single-minded about our mission—building the most robust, reliable, and easy to manage wireless networking solutions for the largest school districts, colleges and universities. We know that your selection of a wireless networking vendor is a critical choice that will need to last up to 7 years.

Enthusiastic and loyal education customers praise our Wi-Fi products, calling them the most reliable and the easiest to manage centrally on a large scale. , the marketplace has to offer.

We're confident you too will discover that a Trapeze Networks WLAN solution is the intelligent choice for educators, today and for the future.

A handwritten signature in black ink, appearing to read "R. J. Trivedi". The signature is fluid and cursive, with a large loop at the end.

Dhrupad Trivedi  
President, Trapeze Networks



**Student-grade mobility™ arrives.** Students and faculty need ubiquitous, uninterrupted wireless connectivity at every point of learning indoors or outdoors. Trapeze Networks meets this standard for seamless mobility with wireless solutions that keep everyone engaged and enable unlimited learning on each individual's device of choice.

**Reliability.** The superior Trapeze Networks wireless architecture delivers 99.999% session-level reliability in the most demanding environments, even under failure conditions. Hitless failover on voice or any other application, and the capacity for easy redundancy configuration without dedicated hardware, makes Trapeze Networks the clear choice for mission-critical wireless deployment.

**Performance.** A Trapeze Networks WLAN solution delivers the high-bandwidth performance that students need for video, gaming and other content rich applications.

A highly distributed architecture maximizes scalability and adds more switching capacity with each new AP. While numerous load balancing enhancements designed to steer clients to idle APs or bands, spread loads more evenly across available resources to give users a consistent experience, no matter how concentrated the demand.

**Ease of management.** An advanced, user-friendly interface and setup wizard make it possible to get a well planned wireless network up and running quickly without needing to become an RF expert.

RingMaster™ management software provides intuitive, centralized management of wireless networks, even across multiple sites. Network managers can easily exploit advanced techniques to eliminate network bottlenecks and maximize performance, all while providing access to tightly correlated infrastructure and services information for fast troubleshooting. Remote, in-service maintenance is a breeze through RingMaster's unified management console.

**Security.** Digital and physical security are both important concerns for educators. That's why Trapeze Networks takes Identity Based Networking to the next level, by augmenting conventional AAA security with location awareness and dynamic authorization. The Trapeze solution makes it easy for non-technical administrators to provision access, services and security for guests, faculty and enrolling students as needed.

**Location.** Real time location services deeply integrated in the Trapeze Mobility System, allows for fast accurate tracking of devices such as laptop carts, or individual devices or key people. Location awareness enables faster emergency response, as well as context aware

**Services and applications.** A Trapeze Networks wireless solution provides uninterrupted access to the wireless services and learning resources students need every day. The high availability and robust connections of Trapeze Networks WLAN solutions maximize your return on investment while delivering the highest quality care.

learning capabilities.

**Interoperability.** Trapeze Networks certifies all of its solutions for interoperability with Wi-Fi-enabled products. Additional testing with leading Wi-Fi devices for use in healthcare ensures that our wireless products perform flawlessly in high-stress environments.

**Support.** Known for outstanding customer satisfaction, the Trapeze Networks world-class support team is always ready to help you with RF planning, deployment and setup, and troubleshooting. On-site consulting is available as part of an extended service package.

**Electronic Medical Records (EMR).** The highest priority for many hospitals, EMR is often the “trigger” application for strategic investment in WLAN solutions. Providing uninterrupted connectivity at every point of care, Trapeze Networks WLAN solutions support all major medical applications for seamless information gathering, analysis, and reporting. Caregivers can access records, order tests, and even process samples at a patient’s bedside, in a courtyard, or even on an elevator.

**Guest access.** To stay competitive, a modern healthcare enterprise must provide both patients and visitors with easy access to the Internet. Trapeze Networks WLAN solutions allow easy setup and management of Internet access in any kind of facility. With SmartPass™ software, nontechnical staff can manage user access by time or location.

**Prescription dispensing.** Each year, medication errors account for over 400,000 incidents and incur \$3 billion in costs. A WLAN-based prescription-dispensing management system lets practitioners manage all aspects of prescription therapy from the point of care, increasing productivity and dramatically reducing the potential for errors.

**Real-time asset tracking.** Sophisticated location services built into Trapeze Networks WLAN solutions enable healthcare managers and workers to track patients, staff, and valuable assets with amazing accuracy—saving time and improving the quality of care.

**Emergency room.** Network downtime is not an option in critical-care environments where lives hang in balance. With medical-grade mobility, emergency caregivers know that their critical-care wireless applications and devices are always available.



# University of Minnesota

Straddling the Mississippi River, the University of Minnesota (U of M) Twin Cities Campus sits on 1,204 acres serving the third-largest student body in the US University system – approximately 80,000 students and staff.



22 Million Square feet indoor WLAN coverage



120,000 Client sessions per day on average





After a rigorous RFP and evaluation of 24 WLAN responses, we determined the Trapeze solution was the right fit to meet the university's performance and security requirements

**Steve Cawley, VP and CIO**  
**Information Technology**  
**University of Minnesota**

### Considerations

A non-profit organization, ABHOW was strongly motivated by cost in choosing a WLAN solution for its CCRC sites. With over 18,000 family members visiting 10 care centers over the course of the year, trouble-free guest access to the Internet was also an important consideration. Manpower constraints demanded a solution that could be set up and managed by non-technical personnel.

### Why Trapeze Networks?

Trapeze Networks offered a WLAN solution that was affordable, robust, and simple to use. With Trapeze Networks SmartPass™ software, nontechnical employees such as receptionists and security guards can easily provision short-term guest leases with security profiles created by the IT department.

### Solution

175-200 access points (6 to 25 per community) and 8 Mobility Exchange Controllers. SmartPass™ works with the wireless infrastructure to simplify management of guest access to the network.

12,000

11n  
Access  
points

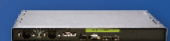


Network  
Management



120

11n WLAN  
controllers





# Olathe District Schools

The largest National Health Trust in the UK, Belfast Health and Social Care Trust (HSC) is responding to budget cuts with technology initiatives. The need to overhaul its WLAN infrastructure gave HSC an opportunity to maximize efficiency while enhancing patient care.







Our experience with Trapeze was excellent, right from the very beginning. We have gotten nothing but positive affirmations from Principals and Teachers who use the wireless every day in their classrooms.

**Jennifer Cutler, Technology Solutions Architect for Olathe District Schools**

### Considerations

Under intense budget pressure, HSC was looking for a reliable, secure WLAN solution that would streamline operations, specifically materials management. The recent merger of six healthcare trusts across Belfast into an HSC also made centralized management a top priority.

Anticipating continued growth, management agreed that the winning WLAN solution must support advanced applications, including voice and location services as well as emerging standards such as 802.11n.

### Why Trapeze Networks?

Trapeze Networks offered the best combination of price, reliability, and ease of use. RingMaster™ software extended the value of the investment with easy, centralized management and the new infrastructure gave HSC a robust foundation for implementing medical-grade applications such as voice and location services.

### Solution

1550 indoor access points, three outdoor access points, and 24 Trapeze Networks MX-400 Mobility Exchange Controllers provide seamless and reliable Wi-Fi service. RingMaster™ adds simplified management and monitoring.

400

Access Points



Network Management



50

Mobility Exchange Controllers





# Fulton County Schools

New England's largest healthcare provider, Hartford Hospital is the very definition of a high-mobility critical care environment. Five major hospitals, 120 buildings, a rooftop trauma center, a crowded inner-city emergency room, and satellite clinics scattered across the region push wireless capabilities to the limit.



3,360

Total VoIP calls by nurses over 24 hours



9,270

Patients admitted via WLAN yearly





“Trapeze Networks offered the most reliable WLAN solution of all the vendors we considered. They promised—and delivered the ‘five nines’ reliability we demand at all of our sites.”

**Al Hofmann: Director of Enterprise Marketing, Hartford Hospitals**

### Considerations

The web of far-flung hospitals and clinics presented a logistical nightmare. An existing wired high-speed network was impractical for doctors and nurses rushing from one place to another. Convinced that wireless was essential for a workforce in constant motion, Hartford wanted a WLAN solution that combined always-on mobility with enterprise-grade security, manageability, and ease of use.

### Why Trapeze Networks?

For Hartford Hospital, the “five nines” reliability and distributed management capability of the Trapeze Networks WLAN solution set it apart from offerings that were not as robust or could not deliver centralized management across multiple sites.

### Solution

1100 Trapeze Networks access points driven by 12 MX-200 WLAN controllers. The RingMaster™ WLAN management suite adds unparalleled RF planning tools that maximize Hartford Hospital’s investment by automating coverage, capacity, and voice planning for all areas, indoor and remote.

1100  
Mobility  
Access  
Points



Network  
Management



12  
Mobility  
Exchange  
Controllers



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