



Trapeze Wireless LAN a Flexible, Reliable Solution for German Trade Fair Company

When it comes to producing international trade fairs on topics as diverse as house and garden, communications, food, furniture and interior design, health, and art and culture, it's hard to beat Koelnmesse.

With 286,000 square meters of hall space, 40 successful trade shows a year, more than 38,000 exhibitors and 2 million buyers, the Cologne, Germany-based company is one of the world's largest trade show organizers.

The company's events cover 90 percent of the world's exportable production of goods. With such a high profile within so many industries and the challenge of constantly working within expansive exhibit hall spaces, Koelnmesse faced a challenge when it wanted to offer its exhibitors, visitors and others attending its trade shows with wireless LAN access.

OBJECTIVE

Delivering a high-class wireless LAN is part of Koelnmesse's plan to boost its competitiveness in the global market. By offering wireless service throughout its exhibit halls, the company can deliver an innovative service to its exhibitors and visitors.

Deploying a wireless LAN is also an economic decision, since it saves the cost and effort of running individual cabling to each exhibitor's booth during a trade show.

But first, Koelnmesse had to overcome the challenge of its inherently complex environment for delivering highly reliable wireless LAN services. Its exhibit hall ceilings are very low—only about 7 or 8 meters high. In addition, the halls have columns located about every 6 or 10 meters that are filled with different types of cables.

As exhibitors rush to build their booths before the trade show doors open, the environment can quickly change from just a few hours before, making setting up a wireless network very difficult. Due to these rapid configuration changes, Koelnmesse needed the ability to accommodate these last-minute variations.

SOLUTION

To bring wireless LAN services to its trade show facilities, Koelnmesse partnered with NetCologne and TGS Telonic. NetCologne is a regional carrier that has provided telecom and data services to Koelnmesse exhibitors since 1998. TGS Telonic is one of the leading systems integrators in Germany.

NetCologne had worked with several different wireless LAN vendors and recommended the Trapeze Networks™ Mobility System™ to Koelnmesse due to its low total cost of ownership, ease of administration, rich features and reliability, and proven, mature technology.

"We were looking for high-quality, state-of-the-art technology that is absolutely reliable and at the same time enables us to pass on reasonable pricing to our clients," says Judith Schmitz, a spokesperson for NetCologne. "Trapeze had the strongest wireless LAN solution to meet these needs."

Ivan Andric, NetCologne's team leader, was impressed by the Trapeze system architecture and the Trapeze RingMaster™ wireless LAN lifecycle management tool suite. In addition

COMPANY DESCRIPTION

Koelnmesse is one of the world's leading trade fair organizers, producing more than 40 successful shows a year for a number of industries, including house and garden, communications and new media, furniture, food and technology. The company has 286,000 square meters of hall space, 38,000 exhibitors and 2 million buyers.

OBJECTIVE

- Increase its global competitiveness by offering wireless LAN services to trade show exhibitors and visitors
- Overcome deployment challenges posed by unusual architecture and RF obstacles in trade show halls
- Have the ability to rapidly change a wireless LAN configuration due to frequent changes to the physical environment

SOLUTION

- Systems integrator TGS Telonic and regional carrier NetCologne recommended the Trapeze wireless LAN Mobility System due to its low total cost of ownership, ease of administration, rich features and reliability, and proven, mature technology
- Koelnmesse deployed five Trapeze MX-400 wireless LAN switches, which control about 100 Trapeze MP access points
- The deployment took TGS Telonic, NetCologne and Trapeze only one week, which included configuration and fine-tuning of the wireless LAN system

RESULTS

- The Trapeze wireless LAN pilot rollout during a trade show was a complete success with more than 1,500 people logging in and no technical difficulties
- The Trapeze wireless LAN can adapt to the specific characteristics of an ever-changing trade show environment in just a few hours
- Trapeze WebAAA makes it easy to perform authentication, authorization and accounting for large contingents of users
- Wireless LAN access throughout the trade show facilities reduces the cost of running cable to each exhibitor booth

to efficient 3D modeling and RF planning capabilities accommodate Koelnmesse's tough, ever-changing environment, RingMaster offers centralized control over Trapeze Mobility Exchange™ (MX™) switches and Mobility Point™ (MP™) access points, making it easy to adapt to changes in the physical environment.

Koelnmesse initially deployed three Trapeze MX-400s wireless LAN switches, which control about 80 Trapeze MPs. It later expanded the wireless LAN to five MXs and 100 MPs. NetCologne advised deploying a higher density of MXs to ensure that its high-class carrier service had additional capacity for growth and consistent availability. Koelnmesse is using Trapeze WebAAA™ for full authentication, authorization and accounting support for web-based users, making it easy to accommodate large contingents of constantly changing users.

The deployment took TGS Telonic, NetCologne and Trapeze only one week, which included configuration and fine-tuning of the entire wireless LAN system.

RESULTS

Koelnmesse's wireless LAN was put first to the test during an event known as Photokina, one of the world's most important trade shows for the imaging industry.

The pilot was a complete success. More than 1,500 exhibitors and visitors logged into the Trapeze wireless LAN, and no technical difficulties were reported.

"At a trade show, you can finish configuring the wireless LAN, take one last look around the exhibit floor, and suddenly there is a wall or a massive booth where there was none just a few hours before," Andric says.

Trapeze's ability to respond to this dynamic environment helps Koelnmesse manage costs.

"Cost-effectiveness is of course one of the highest priorities for a medium-sized enterprise like us," says Schmitz. "The Trapeze wireless LAN can be configured and reconfigured almost with a mouse click, which saves us a lot of time and money. We do not need an army of technicians to redo the wireless LAN every time the physical environment in the halls changes."

Trapeze RingMaster also helped Koelnmesse and its partners reduce costs. RingMaster includes a library of attenuators that represent building materials, including many types of doors, walls, windows, beams ceilings, and other physical obstructions. RingMaster factors-in the impact these obstacles will have on RF coverage throughout Koelnmesse's facilities and allows testing of "what-if" scenarios before deploying any hardware.

"After importing CAD building plans into the system, RingMaster showed us quickly that the manually operated measurements we made earlier were precise," says Klaus Heidelberg, a member of the TGS Telonic team. That saved additional money on installation. "By having a dual confirmation, installation and cabling could be done by a less expensive external service company."

Reliability was a huge advantage in Koelnmesse's complicated environment. "Trapeze met the needs of this most complex venue," says Andreas Schlechter, director of TGS Telonic. "When the wireless LAN was up at Photokina, I was very pleased at not having found even one weak spot."

Wireless will continue to play a prominent role in the business of Koelnmesse. The company is building four new halls with a gross capacity of 80,000 square meters of indoor exhibition space plus an additional 75,000 square meters of outside area.

Koelnmesse is also building a "trade show boulevard" across the fairgrounds property to connect all the halls and a south entrance to welcome visitors. NetCologne will utilize the Trapeze Mobility System to deploy wireless services in the new halls, exhibition areas, press centers and the congress center.

"I am glad we chose Trapeze's highly flexible and easy-to-configure Mobility System," Andric says. "This saves us a lot of work and NetCologne a lot of money."



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