Interconnecting Outdoor WLAN with Internet of Things

Schmitz Cargobull accelerates business processes by networking production sites, improving efficiency and customer service quality

**EXECUTIVE SUMMARY**

**Customer Name:** Schmitz Cargobull AG  
**Industry:** Manufacturing  
**Location:** Europe, Middle East, and China  
**Number of Employees:** 5100  

**Challenge**  
- Achieve 100 percent WLAN coverage  
- Optimize SAP applications on mobile terminals  
- Intelligently connect and improve efficiency of production chain operations  
- Reduce IT effort and costs  

**Solution**  
- Cisco® Outdoor Wireless Mesh  

**Results**  
- Quality of business processes improved considerably  
- Speed of some logistic processes increased by 50 percent  
- Simpler IT management model that can be easily extended

**Challenge**  
As the European market leader, Schmitz Cargobull is one of the largest manufacturers of trailers and semi-trailers in the commercial vehicle sector. Today it offers a European-wide network with 43 Schmitz Cargobull Trailer centres and 1500 authorized service partners. The company currently has nine industrial production sites in Europe and China, and is also active in the Middle East and Western Asia.

Connectivity of people, machines, and applications makes or breaks effective manufacturing. Production lines, people and data, stock and logistics: every part of the process chain must be linked together at all times. The integration of smartphones and tablets, along with other things such as barcode scanners place even greater demands on WLANs.

When Schmitz Cargobull, realized its wireless network was no longer capable of doing the job, it acted quickly to fully integrate all non-connected elements into the WLAN.

There was previously no fail-safe redundancy. So, network crashes forced the company to revert to paper-based methods. After service was restored, this data had to be entered onto the system. And, with limited wireless coverage of large outdoor areas, users had to make repeated log-ins to connect to apps, programs, and storage. Consequently this added expense.

"Instead of making our production process more efficient, the wireless network was slowing it down," says Andreas Heitkötter, manager for network and PC systems. "Because we kept losing connections and having to use paper records, we couldn’t rely on the availability of our data."

**Solution**  
Cisco Outdoor Wireless Mesh now provides 100 percent wireless coverage at one of the company’s main production sites in Altenberge. The solution includes Cisco WLAN controllers and over 100 access points. Cisco Prime™ management saves time and costs by making it much easier to run the network.
“By deploying Cisco products we’ve seen a considerable improvement in the quality of our business processes. That means better customer service and a decrease in costs.”

Andreas Heitkötter
Manager Network and PC Systems
Schmitz Cargobull

The main challenge was to ensure full, guaranteed WLAN connectivity, inside buildings and across very large outdoor areas. Local Cisco partner PCO designed, tested, and installed the new solution perfectly.

“We get regular technical updates from PCO, and it really helped get the project off the ground,” adds Sebastian Langer, network administrator for the Altenberge site.

Results
“By deploying Cisco products we’ve seen a considerable improvement in the quality of our business processes,” says Andreas Heitkötter. “That means better customer service and a decrease in costs.”

When a customer comes to collect a trailer the forklift driver simply logs in to the WLAN to pinpoint its location.

“Data is always up-to-date and therefore accurate,” says Heitkötter. Drivers can see the exact position of every single trailer. There’s no need for time-consuming searches. And these time savings relate to the complete site.

“Staff using forklifts can view their next order on their wireless device. They don’t have to keep making return trips anymore to connect to the system from the central terminal and pick up the next transport order. And they don’t have to work from obsolete paper lists,” says Heitkötter.

IT is managed centrally with Cisco Prime. Routine tasks, such as security updates, take just a few minutes. Guests can be set up with temporary Wi-Fi accounts, something that couldn’t be done before. The process is so simple that office staff can take care of it. This gives the IT team more time to focus on higher-value projects. One of which is to extend the Cisco Outdoor Wireless Mesh solution to further sites.

For More Information
To learn more about the Cisco solutions in this case study, go to:
www.cisco.com/go/en

Product List
Management
• Cisco Prime
Routing and Switching
• Cisco Integrated Services Routers (ISRs)
• Cisco Catalyst® Series Switches
Wireless
• Cisco 2504 and 5508 Wireless Controllers
• Cisco Aironet® 1550 Series Access Points