Lippert Group

Lippert group chooses Aerohive Networks wireless infrastructure

Challenges

- Update existing WLAN infrastructure
- Use the WLAN infrastructure for voice and data
- Integrate WLAN infrastructure with the innovaphone VoIP telecom system
- Achieve comprehensive WLAN coverage despite difficult conditions (storage of liquids, high ceilings, outdoor storage areas)
- Facilitate easy and central WLAN administration of all locations

Results

- Created a scalable, high-performance WLAN infrastructure
- Data applications and telephony share a single, stable, comprehensive WLAN network
- High transfer quality and availability
- Comprehensive WLAN network with high-performance indoor access points, including waterproof access points for outdoor areas
- Simple, flexible remote management of locations with HiveManager by Aerohive

About The Lippert group

The Lippert group is one of the leading specialist beverage wholesalers in the states of Bavaria, Saxony and Thuringia.

As part of the "TOP-Getränke" alliance, Lippert is one of Germany's five top sellling retailers. It is a medium-sized company with three

large logistics centers in Hof (Bavaria), Reichenbach (Vogtlandkreis) and Freiberg (Saxony). Lippert offers a wide range of products and services with a highly efficient logistics system for just-in-time beverage deliveries.

The Challenge

In 2012, Lippert began sounding out the market in search of a new IP-capable telecom system to replace its existing system and provide immediate improvements in efficiency. The existing system was out of date and caused expenses for licenses and hardware.

The company wanted the new solution to update the existing WLAN at its logistics centers and provide a high-bandwidth connection between its headquarters in Hof and its locations around the country.

The new solution also had to overcome several challenges particular to the beverage logistics industry. The company's warehouses are

> "The Aerohive solutions allow system administrators within the Lippert group and our IT partner IBIS to control the wireless network. Aerohive's solutions are easily scalable to meet growing needs efficiently and cost-effectively. Data and voice both run on the WLAN infrastructure, so we're saving the expense of setting up and running two separate networks."
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> —Marco Arit,
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> IT department, Lippert group

used to store beverage crates at constantly changing locations and have ceilings that are more than ten meters high. Evaporation of the stored liquids is causing a high humidity environment that impedes radio signals. And because the beverages are stored on pallets that are frequently moved in and out of the building, the signal coverage constantly changes. These were major challenges when it came to installing a WLAN infrastructure.

Forklift drivers and other logistics staff are using barcode scanners to communicate with the WLAN, which is also used for voice communication. It was therefore vital that the wireless network offer comprehensive coverage while still providing a reliable real-time behavior as far as voice communication is concerned.

The Solution

In consultation with its IT partner IBIS, Lippert evaluated a variety of solutions. While changing the TC system and implementing a modern IP-capable TC system, Lippert also considered changing the existing WLAN infrastructure in the logistics areas. They eventually adopted the Aerohive Networks solution recommended by IBIS. The main factors in the decision included the controller-less infrastructure, offering easy central administration of the whole wireless network and compatibility with the new IP-TC-system. Lippert particularly liked the fact that no controller was required, as this reduced operating costs, made the system more reliable than a controller-based solution, and afforded easy scalability. HiveManager, the central management interface, also allows Lippert to control all installed access points regardless of location. The HiveManager supports the creation of guidelines as well as firmware updates, configuration settings and central monitoring of the whole system.

Lippert is now using robust, powerful and extremely reliable AP 350 industrial access points in its warehouses. These enterprise-class APs support both the 2.4 and 5 GHz bands and are using IEEE802.11n (3x3):3 MIMO technology to handle large volumes of data. They have a bandwidth of up to 450 Mbps and are downwards compatible with legacy systems based on IEEE802.11a/b/g.

Waterproof AP 170 outdoor access points with (2x2) MIMO technology and a capacity of up to 300 Mbps are used in the outdoor storage areas. The intelligent APs from Aerohive Networks organize themselves into a swarm network that is centrally configured and can be administered, controlled and operated using HiveManager's browser-based management interface, without the need of an HW controller. This architecture saves costs and resources during the cabling and planning processes and offers the major benefit of making the whole network flexibly scalable, so that individual access points can be added as required. In the past, buying a central controller also meant buying licenses for eight to sixteen access points, regardless of whether they were needed or not.

The new infrastructure has helped Lippert significantly to improve its operating processes. The new WLAN network integrates data and voice applications into a convergent, homogeneous network that took only two weeks to implement. Centralized administration of the whole wireless network at all of the company's locations via the HiveManager has reduced administration cost. As HiveManager sends only configuration data rather than sensitive and critical business data, an extra level of protection is provided for sensitive data.

Why Did Lippert Choose Aerohive Networks

- Easy and centralized remote management of the whole wireless network infrastructure using Aerohive HiveManager
- Multi-level administration - both the client and the IT service provider can manage the network
- Rapid installation and implementation of wireless network
- Robust, high-availability wireless network despite difficult ambient conditions (humidity, high ceilings, outdoor areas)
- 2.4 and 5 GHz dual radios maximize use of capacity
- Controller-less architecture means there is no single point of failure, and the system is easily and cost effectively scalable on a pay-as-you-grow basis
- Cost-effective, comprehensive solution