ekahau
WIRELESS DESIGN

Planning and maintaining business-critical Wi-Fi for warehouses and production plants
Case: Beaulieu International Group

Beaulieu International Group

Introduction

Beaulieu International Group is a global provider of flooring solutions, raw materials, and engineering products with 29 manufacturing plants, 9 offices, and 8 distribution centers in 14 countries. Beaulieu's ICT department, located in Oostrozebeke, Belgium, is responsible for supporting all of the company's sites.

Challenge

Wi-Fi connectivity is critical for supporting business operation applications and custom ERP systems in Beaulieu's warehouses and production halls. For Beaulieu, the movement of raw materials and finished products is registered in an ERP system using wireless handheld devices as well as devices mounted to forklifts. Issues with Wi-Fi connectivity

SUMMARY

Challenge:

Customer:
Beaulieu International Group

Requirements:
Ensuring Wi-Fi performance and sufficient coverage in challenging RF environments to support business-critical applications.

Giving Beaulieu's ICT team control over their Wi-Fi maintenance and troubleshooting.

Solution:

Ekahau Site Survey & Planner was used for network design, testing, validation and troubleshooting.

Results:

Wi-Fi that reliably supports business-critical applications in Beaulieu's warehouses and production halls. Internal ICT team now has full control over installing and maintaining their production facilities' Wi-Fi networks.

cause problems with stock registration when finished products are entering from production or when products have to be checked-out for transport. Similar to many other warehouse environments, Beaulieu's facilities do not always contain the same amount of products. When the stock is full, there are more products absorbing signals, which often leads to coverage holes.

These constantly changing warehouse environments created the need to plan and test the network during different stock levels. However, when Wi-Fi testing and site surveys were performed by an outside vendor, insufficient knowledge of the production processes contributed to poor Wi-Fi coverage in some areas of the facilities. There was also no way for Beaulieu's internal ICT team to detect and solve these Wi-Fi coverage issues.

Solution

Beaulieu's ICT team decided to start planning, maintaining, and troubleshooting their Wi-Fi networks in-house. They use Ekahau Site Survey & Planner (ESS) for predictive Wi-Fi planning, which has the added benefit of helping them estimate the Wi-Fi installation budget for each site. After each planning phase, Beaulieu uses ESS to perform an "AP-on-a-stick" survey to verify the plan and to define the final number and locations of the access points at the site. A verification site survey is then performed to ensure the installation meets their specific requirements.

Ekahau Site Survey is also used for identifying network issues, detecting areas without sufficient coverage, and planning for existing installation expansions. The team is now able to react to Wi-Fi issues quickly and not depend on external parties for Wi-Fi troubleshooting or surveying.

Tim De Coen, a network and security engineer at Beaulieu ICT shared: "We are really happy with the results. The tools put us in control of the entire process and allow for a swift reaction in every scenario whether it concerns a new installation, an extension, or debugging scenario. Performing worldwide Wi-Fi installations raised problems when working with external planners. With Ekahau we are able to take control of our own Wi-Fi setup and respond quicker to issues and demands. We can now perform planning and installation in our own timeframe and adapt or react to changes. It has never been easier."

ESS has also greatly increased flexibility for Beaulieu as their internal ICT team can now support all sites globally, without having to find local partners for each country. To top off the new efficiency gains experienced by Beaulieu International Group in leveraging Ekahau, the team uses ESS's reporting feature to deliver reports to management on all the different phases of the project.

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Tim De Coen, Network and Security Engineer at Beaulieu ICT