Atlantic and Aruba help global company deploy a next-generation wireless network that delivers centralized management, security and lower TCO.

With headquarters in Düsseldorf, Germany, and operations in more than 125 countries around the world, Henkel needed to deploy a wireless mobility solution on a global basis. The name behind such well-known brands as Persil, Loctite and Schwarzkopf, Henkel realized their existing wireless LAN (WLAN), based on legacy "thick" access points, would not scale, lacked the necessary security, and required too much administration.

Henkel planned to deploy the next-generation WLAN to many of its locations around the world: It would support logistics within their warehouses, employee applications and guest access in their offices and training centers. Given the magnitude of the network, and its importance to ongoing operations, Henkel initiated a rigorous selection process to identify the best-of-breed vendor to provide its solution. Henkel drew up a list of more than 150 requirements against which vendors were evaluated and tested, with ease of management and security at the top of the list.

"We were prepared for the evaluation to be a close run thing," said Detlef Feistl, system engineer and IT specialist at Henkel. "We were surprised when the analysis showed Aruba so far ahead of the competition — fulfilling 87 percent of all the criteria and

far ahead of the nearest competitor that could only meet 50 percent of our requirements. Even more significantly, however, Aruba was the only vendor capable of satisfying 100 percent of our security requirements."

Henkel was so impressed that a global product deployment followed.

Thinking Thin

Until mid-2005, Henkel had only deployed WLANs in select locations for specific purposes. They had found that "thick" access points had a large administrative burden and complex security implementation, resulting in a high cost of ownership. For the required expansion of the wireless network, the obvious choice was a centrally managed "thin" access point solution, combined with WPA-2 encryption and 802.1x authentication, integrated with the Microsoft ISA servers already embedded in their network.

The size of the network meant made automatic radio configuration and radio frequency (RF) management essential. The solution had to be able to take account of the different offices' requirements as well as radio compliance laws in each country. Aruba's centrally managed, locally controlled implementation, combined with its sophisticated automatic Adaptive Radio Management (ARM) on each access point, made the deployment simple.

With some 1100 Aruba access points and more than 90 Mobility Controllers deployed throughout Europe and as far afield as Australia, China, Russia, and the United States, country-specific implementations were essential. Each domain (DNS) implementation uses an Aruba 800, 2400 or 3400 Mobility Controller locally as a master with a redundant local controller to guaranty business continuity. The network is

managed centrally from Düsseldorf using the Aruba Wireless Management Platform.

Approximately a third of the access points currently deployed at Henkel are located within the Düsseldorf office and warehousing facility.

This WLAN provides connectivity for employees using laptops in meeting rooms, for attendees at training courses, and for the handheld scanners in the warehouse used to manage logistics and send real-time data to the backend SAP system. The WLAN also provides connectivity to — and separation of — the large number of guest visitors requiring network access.

Looking Ahead

Henkel is also evaluating Aruba's Remote Access Point Solution to extend the corporate WLAN, complete with the same central control, management, and security, to teleworkers' home offices. Also, although the WLAN is not currently used for voice over Wi-Fi, it was important for Henkel that the solution supports this application through Layer-3 roaming, and also provides the capability to upgrade to 802.11n, at a future date. Aruba met all of these requirements.

"Our experience to date has exceeded our expectations," said Feistl. "The intelligent controller-based architecture has proven to be particularly efficient for projects such as deploying new access points or performing software upgrades. The roll-out of WPA-2 across Henkel's WLAN in Europe was completed in only two hours. With a 'thick' AP infrastructure, such a task would have taken at least two weeks. I am also very satisfied with the network's very high availability and easy maintenance."

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