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MEDIA ALERT

Planning for wireless LAN deployments

Wireless communications are fast becomes the preferred access method for networked devices, with most organisations now using wireless local area networks (WLANs) to handle network connections and allow for the Internet of Things, BYOD, and cloud-based applications. To get the most out of such networks, it is important that they are designed and implemented properly from the outset.

Ilan Rubin, managing director, Wavelink, said, “WLAN implementation is an increasingly complex task, as the explosion of smartphones, tablets, and other portable devices in the workforce tasks wireless networks with a growing burden. This is especially prevalent in highly mobile work environments such as healthcare facilities, factories, hotels and schools. The implications of this demand on WLAN also impacts how they must be secured.

“It is important that the WLAN design factors in industry-specific needs. Different markets have different requirements, which leads to different network design. For example, voice might require seamless roaming; healthcare might have specific applications such as location tracking and hotels or hospitals might have requirements for workflow management using devices. On top of that every wireless network is different depending on the requirements of the business and the physical environment.”

Wavelink recommends three key planning considerations to help make sure WLAN infrastructure is designed and implemented properly:

1. Work out bandwidth demands
The first step to planning for a WLAN deployment is to work out approximately what the workload will look like. Wireless networks are largely designed to share bandwidth among a number of devices, and this factor can affect the initial network design. Networks set up primarily for access to the public, for example, will look very different in design than networks deployed solely for employee access.

2. Determine device density
As wireless networks are loaded with an ever-increasing number of portable devices combined with other infrastructure such as printers, security cameras, production and health monitoring equipment, it is important to create high-density WLAN designs that can ensure access, even if device density rises even further. The capability to deal with such device density can be afforded by a combination of technology aimed at encoding large packets of data and design to ensure optimal signal coverage across the network.

3. Secure the network
Security is one of the biggest factors when it comes to planning an enterprise wireless LAN deployment. Wireless networks can, and have been, used by hackers to gain unauthorised access to networks and access sensitive information. Networks should be protected by solutions that can comfortably combine comprehensive security with enterprise access, enable segmentation of devices and access layers across both wired and wireless networks, provide a flexible platform with end-to-end protection, and are scalable to enterprises of all sizes.