

## **Five benefits of software-defined networking-enabling the wireless LAN**

Meeting the exploding mobility demand requires a more agile wireless LAN. As the network edge transitions to all-wireless, software-defined networking (SDN) and OpenFlow are emerging as ways to deliver new levels of agility and let organisations meet users' expectations for a superior application experience from their mobile devices.

Tablets, smartphones and laptops are just the beginning. Billions of other devices will be connected wirelessly, continuing to drive productivity and efficiency. Gartner estimates that 26 billion devices will be connected to the Internet of Things by 2020.

Ilan Rubin, managing director, Wavelink, said, "With the rapid growth of mobility and cloud services, the wireless LAN is becoming the primary access method. With next-generation 802.11ac technology delivering gigabit throughput today, the transition to an all-wireless access network will only accelerate."

To achieve the full promise of mobility, wired and wireless LANs must be provisioned faster and managed more easily. Today, applications and services depend on two physically separate networks. The user experience differs when using applications over the wired or wireless LAN. Organisations must manage and secure wired and wireless access networks separately, with discrete tools and consoles. The difficulty of provisioning and managing these infrastructures independently is a barrier to achieving the scale that is required.

Rubin said, "SDN can have a transformative effect on networks. As organisations move to virtualisation and the cloud, they see that the manual configuration of legacy data centre networks is time-consuming and error-prone. A virtual server can be created in minutes, but changing the underlying network may take days or weeks. SDN has emerged to remedy this problem.

"SDN-enabling the network edge can pave the way to deliver consistently high performance for essential business applications. Key applications can be prioritised over the virtual network, which ensures a consistent user experience. A more agile access network can better meet the exploding demand for applications and services, letting organisations deliver more network services at a faster pace with fewer or the same resources.

"To deliver on the promise, SDN must work for all users and across all networks, with true interoperability among network components via OpenFlow. With open programmable access to the wireless infrastructure, network-aware applications can communicate directly with the wireless controller and the network can change dynamically in response."

### **Five benefits of SDN-enabling the wireless LAN for organisations**

**1. Create and enforce unified policies network-wide.** IT policies are defined once and then enforced consistently across the wired and wireless LANs. Users have a uniform experience, regardless of their access method.

**2. Build a smarter network that adapts to business needs programmatically.** The network becomes more intelligent and changes dynamically in response to application and business

needs. With SDN enabled across the network, IT can enforce service levels to automatically deliver the necessary network performance, quality of service or security. Open, standards-based application programming interfaces (APIs) make it easy to create SDN applications, which directly and programmatically communicate their network requirements and desired network behaviour to the SDN controller.

**3. Unify management of the wired and wireless network.** Having single-pane-of-glass management for the wired and wireless LAN simplifies network operations and lowers costs. Administrators can view clients using a single tool, no matter which network they're on, and they gain greater visibility into the unified network.

**4. Greater choice of vendors.** SDN is open and standards-based, which means organisations can mix and match network components from different vendors. Ultimately, greater choice creates competition in the market, and that drives innovation.

**5. Simplify network provisioning and lower total cost of ownership.** Because an SDN-enabled network responds dynamically to changing policies and traffic loads, the network administrator is freed from manual, time-consuming tasks. This lets administrators focus more on strategic work, rather than configuring and reconfiguring network devices to meet the business needs, which lowers the cost of network operations.

#### **About Wavelink**

Wavelink specialises in the supply, marketing and support of a range of leading edge Enterprise Mobility and UC Solutions. Wavelink distributes a range of products from Spectralink, Meru Networks, Digium and Polycom. For more information please contact Wavelink on 1300 147 000.