Singapore Management University enhances wireless network with Aruba's mobility-defined networks architecture

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Singapore Management University (SMU), a premier university in Asia, has enhanced their wireless network to support wireless access for up to 99 percent of its entire city campus.

Based on the Aruba Networks, Inc.'s Mobility-Defined Networks architecture, the new infrastructure delivers an enhanced high-performance, campus-wide wireless mobility experience to more than 8,000 SMU students, faculty members, staff and guests.

Powering a variety of tasks, from video streaming and document sharing to complex research and simulations, the new environment promises to deliver capabilities that further enhance SMU's world-class research and distinguished pedagogy.

The University leverages its wireless infrastructure to support e-learning and increasing mobility demands by a new generation of students. Defined by Aruba Networks as #GenMobile, the new generation of students and employees is characterized by their need to be constantly connected to mobility network for both work and play.

On campus, SMU is seeing students from the #GenMobile population connecting three or more mobile devices to its Wi-Fi network at any given time.

With an increasing number of mobile devices tapping on the network, providing wireless access has become more critical than wired. The existing network infrastructure was unable to accommodate the demanding needs of #GenMobile. In addition, as the campus is spread across a busy section of Singapore's city center, SMU had to constantly deal with network intrusions, which affected the quality of the Wi-Fi experience for the SMU community.

SMU requires a Wi-Fi environment that can be trusted to provide stable and secure mobile access to authorized users at any time on campus.

To ensure a seamless and immersive connected experience for users, SMU decided to adopt Aruba's high-speed access points throughout its campus. The University also deployed Aruba's ClearPass Management System for policy management and guest access. The network connectivity and access control allow SMU's IT team to easily authenticate user profiles and apply network policies across user devices and applications. ClearPass also allows SMU to prevent unauthorized network access and ensure that end devices are compliant with network policies.

In the new environment, visitors to SMU are able to obtain guest access to the wireless network simply through an SMS self-registration. Without the need for further IT intervention, SMU has successfully supported many prominent events in the campus auditorium. This included lectures delivered by distinguished speakers such as former US Secretary of State Hillary Clinton, as well as Nobel Peace Laureate and politician Aung San Suu Kyi.

The deployment also enabled SMU to launch eduroam - a secured, world-wide roaming wireless Internet access service developed for the international education community. Visiting students from eduroam-participating institutions can easily obtain Internet access using their own institution's ID and password, minimizing the work required of SMU IT to allow access to every new visiting student. In the same way, staff and students visiting other eduroam-participating institutions can easily connect to their wireless network without going through their IT department.

"At SMU, a seamless wireless connection becomes a requisite as students and faculties use the wireless network extensively for learning, teaching and research," Lau Kai Cheong, SMU's Chief Information Officer and Vice President for Integrated Information Technology Services.

"We wanted a wireless environment that will keep our students and staff connected to resources, anywhere on our vast compound. Inherent to this is the need for a network that is highly reliable and has strong security features that are easy to implement and manage."

Cheong added that staff and students at SMU now enjoy a stable and reliable wireless network environment that is capable of meeting its growing access needs. The IT team has also been

rewarded with many positive compliments and was ranked among the top support service providers in SMU's annual satisfaction survey conducted among staff and students.

"Aruba Networks was selected for its expertise and strong local support. We are pleased with the results that we have seen from the new Wi-Fi environment. Having a reliable Wi-Fi provides a strong foundation for SMU's commitment to generating leading-edge research as well as delivering an interactive, participative and technologically-enable learning experience," Lau Kai Cheong added.