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Network

MIDDLE EAST



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NETWORK AWARDS '13

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INNOVATION AWARDS 2013 EXPOSED

SUMMARY

Objective

With an increase in BYOD use on the British Council Saudi Arabia campus, there was a high demand for internet access across the campus and IT administrators needed a way not only to manage security and access policies, but to provide efficient e-learning facilities and cope with the boom in mobile traffic placing a burden on the network.

Solution

British Council Saudi Arabia implemented Aerohive's scalable, flexible WLAN solution, and its Aerohive Gateway, as well as a network management system to control and secure what is happening on the network.

Results

According to the British Council, the WLAN is now providing high-performance Wi-Fi to staff and students across its learning centre. Students are able to connect on any device to access e-learning, and the network is now secured. The system is also future-proof, allowing access points to be added as and when they're required. The British Council is also rolling out the system in its Riyadh site.



Case study

Education enabler

British Council Saudi Arabia deploys business-class Wi-Fi & Bonjour Gateway to improve BYOD access

British Council is an international organisation for educational and cultural relations and manages a wide range of activities covering the arts, science, technology and education. Through its work, the British Council aims to build long-term relationships with governments, organisations and people to promote a wider knowledge of the UK and the English language.

ENABLING BYOD AND BEST OF BREED E-LEARNING

As an educational and cultural organisation renowned for its creative ideas and achievements, technology within the classroom environment plays a critical role in the British Council's on-going development plans.

At its learning centre in Saudi Arabia, students were increasingly bringing their own smart devices, such as

iPads, onto the campus to learn. The IT department realised it needed a WiFi solution that could meet the high demand for internet access from students and staff using these mobile internet devices, a way to manage increasingly complex security and access policies, the provision of e-learning facilities such as mobile apps and e-books, and the ability to cope with the accompanying surge in traffic on the WLAN network.



↑ The network now provides pupils with uninterrupted Wi-Fi access, allowing them to bring in their own smart devices to use in class and to access e-learning resources, according to the British Council.



↑ The British Council implemented a scalable, flexible WLAN solution to enhance student learning and access to e-learning resources.

IN PRACTICE

TRAINING

Training for staff varied depending on their role. For teaching staff, short training sessions were held at regular intervals, covering all aspects of the project including how to use the wireless access, how to use the secure portal login, how to access apps on iPads and synchronisation and storing devices in the iPad cart. For the ICT coordinator and IT manager of the British Council, more technical aspects were covered, such as accessing the Aerohive HiveManager Online Network Management System, monitoring devices and the Aerohive AP120 Access Points, customising access times and bandwidth.

IMPLEMENTATION ISSUES

Because the Aerohive WLAN was implemented independently of the British Council's current infrastructure, there were no problems and the solution ran smoothly and in parallel with the existing IT infrastructure, said System Rapid.

"As more employees and students bring their consumer devices onto the campus, BYOD is becoming a critical movement that IT administrators must support; and as iPads have become a more prevalent learning tool in our classrooms, controlling and giving the devices uninterrupted access to the internet is key to succeeding in our vision," said Adil Mohammed, IT manager, British Council, Saudi Arabia.

The teaching centre assessed a number of WLAN

solutions, opting for Aerohive because of its controller-less architecture and cloud-based centralised management.

"We required a flexible WLAN solution that was scalable enough to accommodate all of our educational needs and we soon recognised the potential benefits of a centrally managed network. Aerohive's linear pricing model was also a factor in our decision to choose Aerohive – having the flexibility to add APs as and when we need them wasn't an option with control-

ler based solutions from other market leaders like Cisco," said Mohammed.

SECURE WIRELESS

Through consultancy with IT partner System Rapid, Aerohive AP120 Access Points were installed in all of the learning centre's classrooms, offering reliable, secure internet access to all students and teachers regardless of what device they are using.

"As one of our key clients in the region, it was important to carefully match the tech-



↑ Sajid Saleh Hafesjee from System Rapid said installation took place in the evenings and over the weekends to ensure minimal disruption.

nology and solution which best suited their needs. With controller-less architecture, innovative features, simple installation and management, Aerohive Networks AP's were the obvious choice," said Sajid Saleh Hafesjee, senior technical consultant, at value-added reseller, System Rapid.

Once the dedicated fibre optic connection for the project was installed and configured, the actual Aerohive AP installation and configuration took just a couple of days. Customising the secure portal took a further three days, as the IT partner had to finalise terms, conditions and backgrounds to display. Installation took place during evenings and weekends to ensure little or no disruption.

ENABLING APPLE

Using Aerohive's Bonjour Gateway technology the education centre has been able to overcome the challenges

inherent in Apple's "zero configuration networking", when taken out of its native home environment, and enabled these sharing services. The Bonjour Gateway is designed

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**Adil Mohammed,
IT manager, British
Council, Saudi Arabia.**

to allow service advertisements to bridge multiple subnets that make up the network topology of many education establishments like the British Council in Saudi Arabia, and makes sure services are enabled based on identity, location, and time.

As an out-of-band technology, the Bonjour Gateway only participates in the network service advertisement and not the service (AirPlay, AirPrint) itself, allowing the learning centre's existing security policy to be maintained, and ensuring the gateway does not become a bottleneck.

VISIBILITY

With students increasingly bringing their own devices into the classroom, teachers are often at a disadvantage when trying to see what exactly their students are looking at. With this in mind, the education centre is taking advantage of Aerohive's Teach-

erView app, that provides student connection status to the teacher at login, without requiring any configuration. With TeacherView, the British Council's teachers can log in and are presented with a view of what is happening on all student laptops or devices.

The network is now providing pupils with robust uninterrupted Wi-Fi access, allowing them to bring in their own smart devices to use in class and access e-learning resources. Further access points will now also be added as and when they're required, enabling the British Council to meet its existing needs, as well as any future expansion plans.

In addition, the Council has deployed a simple management tool; Aerohive's HiveManager Online Network Management System, designed to enable the IT department to manage and control network and user access from the cloud from a single location. Its user profiling function means that the IT team can authorise access for guests, students and staff according to their specific needs, without any added management overheads. ●

EQUIPMENT INSTALLED

- 8 x Aerohive AP120 Access Points
- 1 x 24 Port Cisco PoE Switch
- UnoCart iPad Sync/ Charge Cart
- 18 x iPad 3
- Dedicated 2mbps Fibre Optic Internet Connection