

Darwin Convention Centre installs NETGEAR ProSafe wireless network to boost business efficiency

Overview

The Darwin Convention Centre (DCC) was built to be a landmark for the city and to provide businesses with a state-of-the-art venue in which to host corporate events.

In order to service the communications needs of patrons, The AEG Ogden Group, the management company for the centre, installed a NETGEAR wireless network giving users the ability to access corporate resources from anywhere in the venue.

Due to the high number of simultaneous users, the network required multiple integrated access points to ensure seamless connection while the sensitive nature of some of the corporate information demanded a superior level of security.

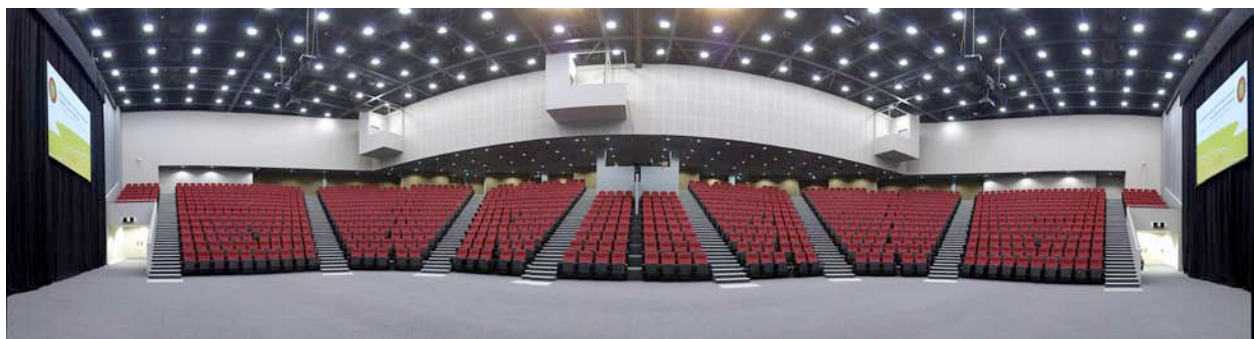
The unique design of the building, with its high ceilings and curved walls, also presented a challenge, requiring a system that could provide a signal strong enough to overcome the architectural restrictions.

The client

The Darwin Convention Centre is outfitted with the latest technology to enhance communications at all corporate events. It is equipped for interactive multimedia and wireless internet and networking, with technology specialists on hand to ensure all communications needs are met.

Special requirements such as cyber cafes, video conferencing, simultaneous multilingual translations or digital voting systems can be organised on request.

<http://www.darwinconvention.com.au>



The challenge

In order to provide conference organisers with a hi-tech facility in which to conduct business, the managers of DCC demanded a wireless network that would enable visitors to access the internet from any point in the venue.

Delegates would require access to company resources instantly, as well as being able to communicate with each other across the floor, so a system that allowed a large user load while still maintaining a seamless connection was essential.

DCC employees would also benefit from the network as bookings information, security data, point-of-sale and customer details are all accessible wirelessly across the entire venue. Events are dynamic and staff members are often required to be on the move, multitasking and dealing with issues as they arise. Being mobile, while still having access to all corporate data, allows the staff to be far more responsive.

The design of the convention centre would prove to be a challenge with its curved walls and high ceilings. All access points (APs) were also required to be out of sight so the equipment needed to broadcast a signal strong enough to penetrate any physical barriers and overcome the architectural design.

Also, to pass fire rating, the walls are constructed of double-sheeted gyprock, another challenge for the chosen technology's signal penetration.

Though most of the staff at the centre is 'tech savvy' it was still important to deploy a system that was easy to use and didn't require extensive training that would use time needed to run the events. Patrons would also require a system that allowed them to connect by simply opening their laptop computers.

The solution

DCC installed 33 NETGEAR ProSafe Access Points and four NETGEAR ProSafe wireless controllers.

Due to the complexity of the install two companies were engaged: Nilsen was contracted to lay the cable and install the APs while Territory Technology Solutions (TTS) installed the controllers and configured the system.

By working together, said TTS' Chris Snowdon, account manager, the two companies were able to present DCC with a wireless solution that would satisfy all of its requirements.

"We did a site survey before the centre was completed and both Nilsen and TTS concurred on the placement of the APs to ensure the best solution for the centre," Snowdon said.

It was recommended the convention centre install four wireless controllers given the large number of APs needed to provide venue-wide coverage. The NETGEAR wireless controllers centralise control of the network and allow for seamless roaming between APs across the centre, so a user can traverse the length of the venue and maintain connection to the network.



The laying of the cables took two weeks and the installation of 33 APs and controllers took three days.

Steve Vaughn, electrical and communications supervisor for Nilsen, described the install as problem-free and praised the support from NETGEAR. “The tech support people were always available and their advice was excellent.”

AEG Ogden Group CIO, Mark Harrison, said the decision to deploy NETGEAR wireless controllers was based on three factors: budget, ease-of-use and familiarity with the brand.

“The competitors’ products were a lot more expensive,” Harrison said. “NETGEAR offered an affordable solution that did exactly what we wanted within budget. Also, we had a good experience with NETGEAR products in another venue and so were happy to use them again.”

The outcome

The DCC can truly call itself an innovative business centre with total wireless coverage across the entire venue.

A recent well-attended boat and leisure show proved the network could handle large user loads while still allowing seamless roaming and problem-free connectivity.

Employees are now free to go about their jobs without being tied down to a single position, improving efficiency and keeping costs low. Jun Salting, IT administrator for DCC said no training was required for employees. They simply log onto the network with a username and password and are free to do their job anywhere in the centre.

Although full support is available Salting has so far not required it. “I’m impressed by how simple it is to manage the network,” he said. “The Wireless Controller allows every AP in the building to be monitored from a single point.

“We can see the whole wireless network through the controller which lets us monitor signal strength and user loads, as well as identify technical issues that may arise such as damage to hardware, unauthorised access to the network or interference.”

The challenges presented by the unusual design of the building and its fire-rated walls were easily overcome, with the NETGEAR equipment providing instant connectivity and maintaining strong signal strengths throughout the entire venue.

The DCC has made provisions to add APs to extend the wireless network as they open new areas and Mark Harrison says this is made possible as scalability is built into NETGEAR’s solution.

“If we need to expand our network we simply add the required number of APs in a process that is basically plug and go.”

