

Portnox™ Case study



Wales Millennium Centre, Cardiff

Wales Millennium Centre is probably familiar to many people, even though they've never been to Cardiff. The iconic building with its distinctive fascia of giant bilingual script has featured in both Torchwood and Dr Who. Since opening in 2004, this government-funded arts centre has become the top tourist attraction in Wales and receives over a million visitors a year. Operated by some 175 full-time, as well as part-time and casual staff, the Centre is also home to eight arts organisations, including the Welsh National Opera, BBC National Orchestra of Wales and the National Dance Company Wales. It has conference facilities, a 1900 seat lyric theatre, a 250 seat studio, recital hall, dance house, bars, restaurants, shops and public spaces, heavily used all year round.



The business drivers

Most of the IT and telephony support in the building is catered for by a four-man IT department, overseen by IT consultant, Adam Gill. Getting the data and network security watertight is top of the agenda as Gill explains, "Wales Millennium Centre takes over £9 million a year in ticket sales and has to process all of the payment card's confidential data. Plus we have 1500 physical access points and need to know what's plugged in, and where, so the network isn't compromised. Even without the driver of PCI DSS regulations, we place network security as a top priority."

Initially Gill looked at introducing a network access control (NAC) system based on protocol 802.1x from the vendor who already supplied the network architecture. This was in January 2009, but immediately the deployment hit a snag: the VoIP handsets in use throughout the Centre weren't compatible with the software, so wouldn't work. "As each phone cost £100 and we had 400 of them, we couldn't afford to buy new ones. The IT team and the vendor spent weeks trying to resolve the problem but finally had to admit defeat," says Mark Heycock, financial controller at Wales Millennium Centre.

The solution

There seemed no answer until, several months later, Gill came across Preventia, an IT security solutions specialist, who suggested a brand new product called Portnox™ from Access Layers, an Israeli company. Portnox took an innovative approach: it doesn't use MAC addresses but monitors the whole network at the port level. "I was sceptical about its claims at first; it seemed too good to be true," comments Gill. "But Preventia offered a free trial so we went ahead, and I'm glad we did because it's a cracking product."

Benefits:

- One screen shows entire network with all 1500 ports. IT team can identify exact location of any access problems or intrusions in real time.
- Time savings: new NAC system saves estimated 5 hours per week over manual network monitoring.
- Saved replacement of 400 VoIP handsets at a cost of £40,000.
- Compliance with Wales Millennium Centre's security policies can be policed and infringements acted on to keep network secure.
- Major part of PCI compliance checklist ticked by new NAC security.
- Portnox supports any IP device, unlike competitors.

The trial began in December 2009 and Portnox had no problem recognising every device including PCs, printers, projectors, servers, back-up systems, smoke alarms, fire alarms, cash tills, air conditioning units and even those VoIP phones. It proved to be independent of the software or other components on endpoint devices and also integrated seamlessly with other security services on the network. For the first time, on one screen, the administrator could view the complete network in real time and pinpoint the location of every device quickly and easily identifying with any access violations or anomalies.

By early January 2010 the trial had been rolled out to cover the full network. Gill was impressed by the speed and ease of the process: "It was painless to install; just a few phone calls with Access Layers in Israel and Preventia. Often these things can be labour-intensive, but Portnox was running smoothly after only a couple of man days of effort spread over four weeks, and this was only because we chose to deploy in stages."

The benefits

Adam Gill recognises that the IT team is a lot more effective and efficient now. They can enable a port immediately on request rather than the user having to wait half an hour for someone to stop another job, walk across to one of the 14 network rooms in the huge building ("That alone can take ten minutes each way," says Gill) and manually patch and activate the right access point (and go back to de-activate it later). "I'm estimating this alone must save us at least five hours a week," he claims.

Policing infringement of the Centre's IT security policies used to be a headache. The new system makes it easy to ensure the staff in both Wales Millennium Centre and its resident organisations adhere to security guidelines -- any unauthorised device is disconnected by Portnox and an alert sent to the IT manager's mobile or PC so it can be investigated. The system has already prevented an unauthorised wireless access point being connected to the network.

Another benefit is on the compliance front. "The new system means we don't get network intrusion, either accidentally or on purpose. The public areas were always a concern before and when you have ten conferences per day, the potential for a port being left open and someone trying to access the network existed under the old regime. Now anyone plugging in a foreign device of any sort, will be automatically disconnected," explains Gill. Thus Portnox plays a key role in ensuring Wales Millennium Centre meets PCI standards, and the Centre won't be liable for heavy fines for non-compliance: in itself a financial bonus, even if indirect.

The granularity of the new NAC system is also impressive. Most administrators have only a vague idea of the number and nature of devices on the network, but by creating a unique fingerprint for each bit of hardware, Portnox tells Gill's team exactly what's there. And it lets them control access, not only for individual bits of kit or a particular person in a given room, but even for fixed time periods.

In terms of support, Gill has praise too: "Preventia has worked diligently in partnership with Wales Millennium Centre to find the solution that is right for us, and not tried to force a fit as I've experienced with other IT suppliers."

And his final verdict is: "I never thought I'd install a bleeding edge product, but Portnox has proved to be as good as its claims."

