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More Wi-Fi, Less Hardware: Taking It to the Cloud

by Brian Clayton, Director of Information Systems at Taft, Stettinius & Hollister LLP

Over the past couple of years, I’ve seen firsthand how the demand for greater mobility and access has grown. As is the case with other law firms, when mobile devices like iPads hit our offices, we were forced to respond — with a comprehensive wireless solution, appropriate security controls, proactive traffic management, etc. Attorneys started requesting Wi-Fi access either for client meetings or for office-to-office mobility with laptops. Our IT team always responded with a solution — first with individual consumer-grade access points and eventually with controller-managed access points in conference room areas. But soon we had an issue of ad hoc Wi-Fi sprawl. Different brands of access points all programmed in different ways — it was totally unmanageable.

Meanwhile, the requests for Wi-Fi increased as our attorneys purchased iPads and adopted a “bring your own device” mentality. For years we’d been encouraging our users toward greater adoption of technology, and now we either had to allow it or fight it. It was clear that mobile devices weren’t going away and that we had to get in front of this trend. We chose the “don’t fight it, perfect it” approach.

The Need: Wi-Fi Everywhere, All the Time

When I transitioned from Technical Operations Manager to Director of Information Systems at Taft in early 2011, the Wi-Fi network had become unruly. We had outgrown our Cisco wireless controller, meaning that adding access points also meant buying a new $10,000 controller. In addition, we were dependent on a Cisco engineer for configuration changes, which often took too long to schedule and complete. I had no idea who was on the wireless network or what they were doing on it, and I was concerned about my users adding their own rogue access points to the network.

At the same time, all of our offices were demanding Wi-Fi with seamless roaming officewide. The introduction of the iPhone and the iPad created a stampede of users who wanted wireless access everywhere, all the time. Our attorneys started out using Exchange on their devices, then they were saving files on Dropbox, and then they were using Skype to speak with their kids across the network and asking for a user-friendly version of Citrix for smaller screens. I recognized that we had migrated to an environment in which consumer devices were being used for business applications, so an officewide Wi-Fi deployment made sense. But it was very important to me to find a solution that was secure, truly scalable, iPad-ready and easy for us to manage without an outside engineer.

The Solution: Taking Wireless to the Cloud

With these requirements in mind, one of our technology consultants recommended an innovative WLAN solution: Meraki cloud-managed Wi-Fi. This system’s access points

“With a few mouse clicks, we secured our network.”
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are managed through the Internet via an easy-to-use enterprise management console. Because our offices wouldn’t be tied to a traditional hardware controller anymore, we would have a lower total cost of ownership (TCO), and we could base our decisions about access point purchases entirely on business requirements rather than technical restrictions.

We piloted this solution with our Indianapolis office. Twenty access points were installed in just a couple of days, and attorneys and clients started attaching immediately after the install.

We soon recognized other advantages of this cloudmanaged wireless solution besides the low cost and high scalability. The management dashboard is so intuitive that we can handle all of the configuration and daily monitoring ourselves. With a few mouse clicks, we secured our network to protect internal resources, established monitoring for rogue access points, set a maximum per-client bandwidth and blocked unwanted applications from our network. And with the built-in application traffic-shaping, we were able to manage traffic (business vs. personal, voice vs. iTunes) to protect our bandwidth.

About six months after our Indianapolis pilot, we deployed the solution across the rest of the company. With the plug-and-play, self-configuring access points, our technology partner, ESI, completed the entire deployment (45 MR16 dual-band access points) across the remaining offices, most with multiple floors, in about 12 days.

It was a simple concept and simple installation that has simple management. Meanwhile, our users are happy, and our IT team feels at ease with our “open device” option. I’m still amazed … I mean, really, how often does this happen?

THE CLOUD: LOVE IS IN THE AIR
The cloud plays an interesting role in enterprise IT today. Years ago, a technician literally sat next to the server; now I visit the server room once or twice a month. As technology continues to evolve, we’re talking about putting the server room in a place I might have to fly to get to.
In actuality, I now recognize three types of cloud experiences:

- **The personal cloud** — iTunes, Dropbox, etc., for applications that aren’t inherently business-related but still get used during business hours;

- **The private cloud** — like our helpdesk, Exchange server environment, DMS, etc., which can sit anywhere or be outsourced; and

- **The public cloud** — like Rackspace, Gmail or the Meraki Cloud Controller, where we don’t have control over the services, but we use them because we trust that the services will be provided as promised.

What you get out of the cloud is convenience, and what you have to give in return is trust. No doubt that for some services we trust “our way” more — such as hosted email exchange — but for many things, the cloud provides a consistent user experience, more conveniently. Our attorneys might not care whether things are convenient for IT, but they do care about that consistent user experience: It should work just the way it worked the last time.

The cloud-managed Wi-Fi provides that consistent user experience. The entire environment, office-to-office, uses the same SSID or key and password for devices. Meanwhile, I’m able to deliver that consistent experience because I can manage 60+ devices through one interface and make changes from anywhere.

Of course, I had to develop trust in order to deliver my Wi-Fi management to the cloud. But every day I’ve been with this system, I’ve had the same service I had on day one, as promised. The experience is consistent, and there’s never been a time when I couldn’t reach the controller. A physical controller could have been right next to us, but if it had problems, there was no redundancy. The cloud has built-in redundancy. Meraki also features two-factor authentication and daily penetration testing to secure the management platform.

With a solution that works so well for us, my only hope is that the company’s zest for innovation and great service continues well into the future. ILTA

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