

ARUBA AND CLEARPASS MAKE A PERFECT FIT



When the Fashion Institute of Technology, one of the hottest internationally-recognized colleges of design, fashion, art, business and technology, tasked Gregg Chottiner with providing next-generation Wi-Fi to meet educational and guest access needs, he needed equipment that could deliver.

“At many schools, students take the first couple of years to find themselves,” explains Chottiner, VP of Information Technology and CIO at the New York City-based institution. “At FIT, they declare a major almost immediately. This makes our student population very dedicated, meaning we need to provide reliable, secure network access 24/7.”

“Academically,” he continues, “a unique aspect of our curriculum is enabling students to use real-world industry applications. This includes software such as the tools deployed at famous design houses, which we convert to run in a higher-education environment.”

“So,” he adds, “we needed a pervasive wireless network capable of handling multiple types of complex, often proprietary, business applications.”

A SPECTRUM OF UNIQUE NEEDS

FIT, a 10,000-student division of the State University of New York (SUNY) system, also faced a range of other wireless networking hurdles.

“For example, we operate The Museum at FIT, which is among a select group of specialized fashion museums that draws over 100,000 visitors annually,” says Chottiner.

“At the Museum, and in spaces throughout campus that we rent to the public on a daily basis, we needed high-performance, reliable, secure access for guests as well as students, faculty and staff,” he adds.

Additionally, FIT sought to construct more flexible 21st Century classroom spaces, which includes Apple-enabled equipment and networking gear, such as Apple TV and Bonjour.

BENEFITS:

- Adopted Aruba ClearPass Access Management System for centralized, comprehensive policy enforcement, including ClearPass Policy Manager and ClearPass Guest.
- Delivered next-generation 802.11ac Wi-Fi with Aruba 7240 Mobility Controllers.
- Enabled secure BYOD faculty/staff and guest access for thousands of corporate and student users as well as over 100,000 Museum visitors annually.
- Resolved issues related to high-density New York City radio frequency interference.
- Integrated fully with video surveillance system and wired networking infrastructure.



“With Aruba’s 802.11ac-enabled WLAN and ClearPass management tools we can achieve teaching and learning innovations we haven’t even thought of, yet.”

– Gregg Chottiner,
VP of Information Technology
and CIO, FIT



“With 100 percent of our faculty requesting wireless access, and many of them leveraging BYOD, we sought to begin eliminating wired connections,” Chottiner says. “To that end, we’re building multi-purpose classrooms instead of wired computer labs.”

“Our goal,” he adds, “is providing wireless access that gives a comparable experience as with wired connectivity, creating more impactful, collaborative learning environments.”

Yet another concern for FIT was surmounting obstacles related to the institution’s vertical orientation and physical placement in the heart of noisy Lower Manhattan.

“Our tallest residence hall is 20 stories, with an average campus building height of 10 stories,” Chottiner says. “Plus we have to contend with various types of frequency interference surrounding us. Also, our population is very dense.”

LAYING A FUTURE-PROOF FOUNDATION

As the wireless requirements and challenges mounted up, FIT’s existing Meru wireless network became increasingly insufficient. “The wireless experience was so frustrating our users were really upset,” recalls Chottiner. “That led to a proliferation of rogue access points and even more management headaches.”

For a new, future-proof solution, FIT evaluated offerings from its current manufacturer as well as Cisco, Aerohive and Aruba.

“We felt that Aruba was the innovator in the group,” Chottiner says. “Still, we held an in-house bake-off to test how well solutions blocked radio frequency interference, streamed large video files and more. Among other things, Aruba’s controllers were superior for managing RF interference.”

Indeed, FIT ultimately invested in about 1000 Aruba access points as well as three Aruba 7240 Mobility Controllers.

Part of the 7200 series of controllers, the 7240 controllers not only support over 32,000 wireless devices, but also perform stateful firewall policy enforcement at speeds up to 40 Gbps. This provides plenty of capacity for BYOD as well as devices utilizing the next generation wireless standard, 802.11ac.

Application-aware, the 7200 series prioritizes mobile apps based on user identity and offers exceptional scale for device densities such as those FIT faces on a daily basis.

“Significant brand-name global entities – including banks, technology companies and cosmetics corporations – rent out our Great Hall and other spaces,” Chottiner explains. “Also, major law firms lease our dorm rooms for the summer. All of these guests expect quality wireless access.”

MANAGEMENT WOVEN INTO THE WLAN FABRIC

Beyond the wireless networking infrastructure, FIT sought management tools to significantly improve controls. It selected the Aruba ClearPass Access Management System, including ClearPass Policy Manager and ClearPass Guest, as well as the Aruba AirWave Network Management System.

“In our head-to-head comparisons, Aruba’s ClearPass was superior to Cisco,” Chottiner says.

The ClearPass Access Management System provides organizations like FIT with AAA (Authentication, Authorization, and Accounting) services, assisting organizations with comprehensively managing network policies, onboarding and managing devices securely and admitting guest users, all from a single platform.

“With ClearPass we’re able to tie an IP or Mac address back to someone,” says Chottiner. “We can manage what level of access we provide to students, faculty/staff and guests as well as improve our management of the network to ensure it is stable and reliable. We couldn’t do that, before.”

Another advantage to Aruba’s products was the ability to integrate seamlessly with FIT’s Cisco-enabled wired network. “Even though we have Cisco in our core, by choosing Aruba we didn’t have to be Cisco out on the edges,” Chottiner says.

Another benefit of Aruba’s vendor-agnostic approach is giving FIT the ability to move some video surveillance functions onto the wireless network. Specifically, FIT installed a Cisco wired surveillance solution, but wishes to leverage its Aruba WLAN for door locks and cameras.

“It’s very expensive and arduous to run wires to all kinds of locks and camera positions,” explains Chottiner. “Leveraging our Aruba WLAN provides the flexibility to quickly and cost-effectively add security equipment to our system. Most importantly, ClearPass permits managing the locks and camera equipment, centrally.”

In the classroom, the benefits of Aruba’s video-handling capability are also evident. “By the nature of our curriculum, we’re very video-intensive,” Chottiner notes. “Our testing showed Aruba out-performed the contenders when multiple students needed to stream the same large video or presentation file, at the same time.”

At the end of the day, Chottiner emphasizes the real value of the Aruba solution is how it enables his organization to pioneer new educational initiatives.

“It’s critical that FIT can continue pushing the innovation envelope,” says Chottiner. “Aruba is helping us reach innovation levels that we’ve already identified and will assist us with achieving things we haven’t even thought of, yet”

ABOUT ARUBA NETWORKS

Aruba Networks (NASDAQ:ARUN) is a leading provider of next-generation network access solutions for the mobile enterprise. Its Mobile Virtual Enterprise (MOVE) architecture unifies wired and wireless network infrastructures into one seamless access solution, enabling entities of all sizes to securely address the Bring Your Own Device (BYOD) phenomenon, dramatically improving productivity and lowering capital and operational costs.

Based in Sunnyvale, California, Aruba has operations throughout the Americas, Europe, Middle East, Africa and Asia Pacific regions.

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www.arubanetworks.com

1344 Crossman Avenue, Sunnyvale, CA 94089

1-866-55-ARUBA | Tel. +1 408.227.4500 | Fax. +1 408.227.4550 | info@arubanetworks.com