Building campus network that meets the needs of today and tomorrow

Ateneo de Davao University, a private university in Davao City, the Philippines, was established in 1948. The university is the seventh Jesuit institution of higher learning in the country and one of just six universities to have been granted ‘Institutional Accreditation’ status by the Philippine Accrediting Association of Schools, Colleges and Universities. Ateneo de Davao University, which was recognized as a Top Three Law School in the Philippines in 2019, employs some 1,500 faculty members and staff and currently teaches over 17,000 students.

A robust Wi-Fi network is essential to any modern university. Tablets, laptops and smartphones have become everyday necessities, whilst the fast uptake of digital learning tools, Internet of
Things, converged networks and smart building applications are also driving demand. Ubiquitous, high-bandwidth, low-latency connectivity is essential in lecture halls, dorm rooms, sports facilities, student laboratories and other areas. Administrators were facing challenges in providing reliable internet access to students, faculties and staff, as well as guests and temporary users. In addition, the original network configuration was making it hard for administrators to reliably and securely divide network traffic between different groups of users.

As the student population grew over time and teaching staff increasingly adopted digital teaching and learning methods, bandwidth demands on the network continued to grow. Temporary measures such as adding APs only worked up to a point, while ongoing management and maintenance took up valuable time and resources from increasingly stretched IT staff.

Ateneo de Davao University’s requirements were straightforward: a robust, high-performance network that was not just reliable, but also scalable. CommScope Ruckus network solutions deliver on these requirements, at a much lower total cost of ownership. High-performance, reliable wired or wireless connectivity is now available across the campus. Stackable Ethernet switches and high capacity Wi-Fi ensure networks are scalable.

Ruckus ICX switches form the basis of a network that was easy to set up and manage. Troubleshooting is minimized and future upgrades are easier, such as for 10G deployments. This enterprise-class switching platform not only meets current network demands, but also offers plenty of room to scale up with future expansion in mind. Indoor and outdoor APs provide ubiquitous campus-wide coverage. Integrated into each AP is the Ruckus BeamFlex+™ Adaptive Antenna, which provides extended range and adaptive signal steering for the most reliable Wi-Fi. The directional, high-gain antennas dynamically combine to deliver 2-4x coverage over typical outdoor APs. This allows reduces the number of APs necessary to cover any given area on campus.

“The University was looking to upgrade existing Campus LAN to be future proof with 10G. The plan was to roll this out across all three major campuses - Jacinto, Matina and Bangkal. One of the main challenges was that the huge inventory of HPE switches that had previously been installed, which came with lifetime warranties. Switching to a new product line of Ruckus seemed like a risk. The customer was a little apprehensive about being the first reference site in the Philippines. However, we were able to provide a successful Proof of Concept and the solution proposed was taken into consideration.”

Crissy Bancil-Gocolay, Regional Sales Manager
Ruckus Networks at CommScope
Immediate improvements

With the new network in place, IT staff at Ateneo de Davao University could see improvements right away. IT staff could now easily onboard students, faculty and staff, or guest users onto the network, and at the same time ensure network separation policies are enforced for better security. Administrators now also had a better, more informed view of campuswide network capacity and bandwidth usage. Network setup and management were greatly simplified. One obvious improvement of the upgraded network was the clear increase in performance, especially for bandwidth-hungry and latency-sensitive applications such as streaming video and internet voice-calls.

University administrators can now focus on enhancing the learning experience for students without worrying about optimizing Wi-Fi. Reduced workload frees IT staff up for other valuable projects. Looking ahead, IT staff are exploring ways to scale the University network to meet future student needs with regular equipment upgrades.

“Our winning strategy was our consistent message about what Ruckus ICX switches can offer. The Ruckus team also provided two ICX 7250 units to the University to test our ‘stacking’ approach. They could test our switches at their own pace and experience the CLI /configuration steps. Following the success of this test, the University initially purchased 20 ICX units, and are now considering a complete roll out across all the other campuses. The keys to success were direct engagement with the end user, our solution message and the team’s commitment to enabling the customer succeed. The customer is happy with the product performance and the value provided by CommScope and our partner.”

Crissy Bancil-Gocolay, Regional Sales Manager
Ruckus Networks at CommScope

“A connected campus was certainly a revelation, but the former network was designed for a different era. We needed infrastructure that could grow with us into the future. As we’ve scaled our campus network in line with the evolving needs of a growing student population in a digital age, managing all the required APs was becoming increasingly difficult. CommScope’s Ruckus ICX switches helped simplify network set-up and management, enhance security and minimize troubleshooting, while also making future upgrades easy. We can now manage our entire fleet of APs with ease, making it much easier for students, faculty, and even guests to access to our Wi-Fi network when needed.”

Fr. Ramon Prudencio S. Toledo, S.J.,
Director, University Information Technology Office
Ateneo de Davao University

Jeremy S. Eliab, Executive Vice President
Ateneo de Davao University

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