AL QASIMIA UNIVERSITY
Rapid Expansion and High Expectations Demand More from Wi-Fi

RUCKUS an ARRIS company

CASE STUDY

OVERVIEW

Al Qasimia University, located in Sharjah's University City in the United Arab Emirates, has grown steadily since its founding in 2014. The university has a strong commitment to meeting student and staff expectations for rich educational content and learning management applications delivered wirelessly.

REQUIREMENTS

- Connectivity for hundreds of simultaneous users in busiest locations
- Consistent, high quality user experience
- Expandability and new features that can be added as required

SOLUTION

- 1,000 indoor and outdoor 802.11ac access points
- 2 Ruckus SmartZone Controllers

BENEFITS

- Increased the number of concurrent users
- Reliable and seamless coverage throughout the campus
- Future-proof network

AL QASIMIA UNIVERSITY ENSURES A CONNECTED FUTURE FOR ITS STUDENTS WITH RUCKUS NETWORKS

Al Qasimia University, located in Sharjah's University City in the United Arab Emirates, has grown steadily since its founding in 2014. The private university already has about 1,200 students enrolled and is undergoing a major facilities expansion program across its 1.4 km2 campus, including a new academic building and student residences.

The university has a strong commitment to meeting student and staff expectations for rich educational content and learning management applications delivered wirelessly.

But as enrollment increased, the university recognized that its Wi-Fi wasn't capable of keeping up with demand. Ali Al Agha, IT Director for the university, says: "Today's young adults are digital natives, meaning they have grown up with technology. Students expect to access educational material and submit assignments wherever they are on campus using the campus Wi-Fi. We want to provide optimal connectivity and bandwidth to ensure the best possible service."

With the university's growth plans, IT had a long list of requirements for a Wi-Fi upgrade that included the ability to handle high-density environments, campus-wide Wi-Fi access, and quality of service. "We found Ruckus to be the best in the market. It is also cost-effective and has the capacity, coverage and scalability to grow to meet our future needs," says Al Agha.

RUCKUS WI-FI REACHES EVERYWHERE AND HANDLES EVERYTHING WITH EASE

The IT department is deploying about 1,000 indoor and outdoor Ruckus APs. "This will give us the capacity for the new buildings and also expand the network to cover all of the campus, including outdoor locations and the car park," says Al Agha.

Ruckus BeamFlex technology enables each AP's antenna to continually monitor its environment and adapt the antenna to create the optimal pattern for each device, as well as increase the range of operation. BeamFlex also helps mitigate interference, which helps ensure reliable performance in all types of environments. Ruckus PD-MRC enables the AP to adjust the connection to each user's device location and also how the user is holding the device (its orientation) at any given moment, to ensure the best possible signal.

> "Ruckus is meeting the performance expectations that are important to our students and educators."

ALI AL AGHA
IT Director, Al Qasimia University

"We believe that connection reliability happens at the mobile edge, where the AP connection to the device is the most vital element in the performance equation," says Al Agha. "Ruckus excels in delivering best-in-breed performance with its patented technologies. Students are able to connect reliably from anywhere."

In addition to connectivity, the new Wi-Fi network has to serve high-density and high-capacity demands. The university has as many as 2,000 users overall (including students, faculty, administration and other staff). At peak times in the busiest locations, the Wi-Fi network has to handle hundreds of concurrent users. The traffic can be bandwidth-intensive, as students may be uploading or downloading hundreds of MBs of academic content and assignments.

"A single Ruckus AP can manage hundreds of client connections simultaneously," says Al Agha. "The technologies built into the APs ensure great performance for even our busiest areas. Ruckus also supports the wide range of mobile devices that our students use."

BeamFlex helps supports the demands of video and voice communications. "We also use Ruckus SmartCast, a dedicated Quality of Service engine that further optimizes performance for video and voice applications," says Al Agha. SmartCast combines capabilities like packet inspection, automatic traffic classification and advanced queuing and scheduling.

"Ruckus is meeting the performance expectations that are important to our students and educators," says Al Agha. "Their Wi-Fi also supports our growth plans without requiring us to add new investments."

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