CITE INTERNATIONALE UNIVERSITAIRE DE PARIS

802.11ac Keeps Residents Connected

Ruckus ™
Simply Better Wireless.

CITÉ INTERNATIONALE UNIVERSITAIRE DE PARIS

OVERVIEW:

Founded in 1925, Cité Internationale Universitaire de Paris is a private foundation that doesn't just serve one single university, but is a housing development for all students who attend a university in Paris, France. Playing a central role in welcoming international students, the Cité Universitaire takes great measures in making students feel at home.

REQUIREMENTS:

- Wireless network that delivers predictable performance and coverage in high density environments.

- Enable students and residents to have the connected home experience.

- Securely connect tenants devices to the wireless network.

SOLUTION:

- Deployed 400 ZoneFlex R500 APs to cover residential units and R710 APs to cover common areas.

- Ease of management with Virtual SmartZone (vSZ-E).

- Maximized performance and coverage.

BENEFITS:

- Improved the overall Wi-Fi network performance.

- Easy to manage with flexibility.

- Future proof network.

- Increased the amount of concurrent users.

RUCKUS WIRELESS TURNS 90-YEAR OLD STUDENT CAMPUS 100% DIGITAL

When students arrive at their college housing, you can expect their bags to be packed with clothes, toiletries, bedding and at least 3 different mobile devices. The advancement of technology has hit the higher education sector making reliable Wi-Fi an essential utility tool for student housing. Whether you live on campus in the dorms or off campus in student housing, the need to have reliable Wi-Fi is a must. Residents expect to have Wi-Fi as an amenity allowing them to have the same comfort as at home.

Founded in 1925, Cité Internationale Universitaire de Paris is a private foundation that doesn't just serve one single university, but is a housing development for all students who attend a university in Paris, France. The Cité Universitaire plays a central role in welcoming international students and takes great measures at making sure their residents feel at home during their stay. In order for students to be successful in their studies, they need to be able to connect and stay connected.

CHALLENGE

Reliable Wi-Fi is vital to a student's education and the city recognized this importance. Competing with other housing developments around the world, providing the best amenities helps keep residents and increase the occupancy rate. The Cité Universitaire offers 6,000 rooms spread over 40 houses and serves over 6,100 students and researchers. Initially, all the buildings were interconnected by fiber optics delivering high speed Ethernet to each room. However, with the proliferation of mobile devices, the issue of fast and reliable wireless connection became more prevalent for the Cité U. The Internet was becoming slow with less coverage and students were becoming frustrated.

"If we look at how the network is being used, we can see that Skype represents 50% of the bandwidth used. What the students really want from Wi-Fi is to provide enough bandwidth for quality video when using Skype which is, of course, when everyone else is using Skype since they're all using it within the same time frames," states Jerome Dufraisse, Information Systems Director of the Cité Internationale Universitaire de Paris.

The Cité U. provides more than just housing, but also a library, café, theater room and common areas. This allows the students to stay in the city while doing their studies instead of always having to be at the university they are attending or searching for a café that offers Wi-Fi.

The Cité U. was searching for a way to improve the quality of coverage and connection for the students. Its vision was to provide a future-proof modern network

"The 'Cité' of the 21st century' is up and running with everything we need to allow students from around the world to study under the best possible conditions. With the help of Ruckus Wireless, we are now able to reach our goal to becoming 100 percent digital."

JEROME DUFRAISSE
Information Systems Director,
Cité Internationale Universitaire de Paris

to its residents.

SOLUTION

The Cité U. turned to partner IPSILAN to help with their Wi-Fi needs. As several suppliers were put to the test, Ruckus won through ease of use, performance, reliability and low cost.

"We wanted an offer that was scalable and Ruckus emerged as the most competitive solution. These days, most manufacturers offer licensing packages which require additional costs when you want to buy another license. For example, if I have 250 licenses and I want to move to 500 licenses, the additional access points would be an additional cost which is extremely expensive. That is not the case with Ruckus," says Dufraisse.

The housing in the Cité Universitaire consists of different buildings, all built at different time periods. Each one has its own unique architectural style and name. Because of the different materials used in each building, the design of the network needed to be assessed. The project of this deployment has taken place through different phases with the ultimate goal to move to a complete 802.11ac infrastructure. IPSILAN used the cables that were already present in the buildings to position the access points where needed and integrate them directly to the network. The deployment of 400 ZoneFlex R500s brought great Wi-Fi coverage to the housing areas. These access points offer high RF performance and include a built-in BeamFlex+ adaptive antenna technology that focuses RF signals toward each associated client, ideal for high-density environments. They have automatic interference mitigation to deliver consistent, predictable performance and a two-stream MIMO 2x2:2. For the common areas, the 802.11ac Wave 2 ZoneFlex R710s were deployed. The R710 provides up to two times extended range with up to 6dB of signal-to-interference and up to 15dB of interference mitigation. These access points provide the city with unprecedented 4x4:4 and MU-MIMO to address the need of high density wireless deployment and speed.

The access points are managed by two Virtual SmartZone (vSZ-E), selected for the flexibility of virtualization. This software platform allows the city the capability for its network to grow and adapt to the changing needs of its business to deliver an optimal wireless experience.

"The versatility of the Ruckus network has greatly simplified our lives and enables us to handle unexpected upsurges in activity calmly and serenely," comments Dufraisse.

A key advantage of the city's new Ruckus solution is the performance boost it gives to any device, including gear built for earlier standard, such as 802.11n. "The new solution improved the overall Wi-Fi network performance and there have been no complaints from the residents. The system is so easy to use with no training required and everyone is happy that it works."

"Due to the optical network and optimized infrastructure with increasingly optimal Wi-Fi coverage, we now have the needed bandwidth, high speeds, and excellent coverage from one building to another," concluded Dufraisse.

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