

IE University Madrid chose Arista for its high-performance campus network at IE Tower, supporting over 7,000 staff and students.

Highlights

Challenge

As a top educational institution, IE University deploys best-of-breed technologies to ensure a world-class learning experience. With the inauguration of their new IE University Tower in Madrid, the university needed a campus network to meet the demands of cutting-edge technologies together with the hybrid approach to learning that the pandemic necessitated. Opening the building in time for the next academic year whilst working around the limitations imposed by the pandemic meant there were major challenges and strict deployment timelines to overcome.

During the Covid-19 pandemic IE University in Spain was faced with unprecedented demands for remote access by students and staff. At the same time, it was preparing to provision its new 32-storey IE Tower in Madrid, including the entire IT and networking infrastructure.

It was an opportunity to innovate. Considering lessons learned from the pandemic and the projections of its future needs, IE University adopted a new hybrid educational methodology, designed to facilitate flexible and remote learning.

It quickly realised the hybrid approach using the latest technology to ensure an excellent learning experience would necessitate a high-capacity network with equally robust Wi-Fi access points. After careful evaluation of available technology, IE University chose Arista to deliver a Wi-Fi and networking solution with a cloud-based management system to enable it to provide fast, reliable connectivity for students on campus and deliver high-fidelity audio and video for remote learning.



Solution

- Arista's cognitive campus' open and standards-based architecture integrates with IE University's technology ecosystem, outperforms connectivity requirements and can expand and adapt to future requirements
- Arista's 720XP multigig series, 7050X3 series, and 7020R series together with AP-C260, AP-C230 and AP-O235 WiFi access points, create the campus network
- Arista Zero Touch Provisioning automation allowed the deployment and setup of the network overcoming strict timing constraints
- CloudVision as a Service provides operations teams with real time telemetry as well as provisioning, compliance and other features that keep the network at the optimal operational state

Project Background

IE University is a leading private university in Spain that specialises in delivering impactful education for the leaders of tomorrow. The university provides a dynamic educational ecosystem which comprises an extensive, top-tier global IT network, world-class virtual and on-campus facilities, an inspirational faculty and prestigious institutional partnerships.

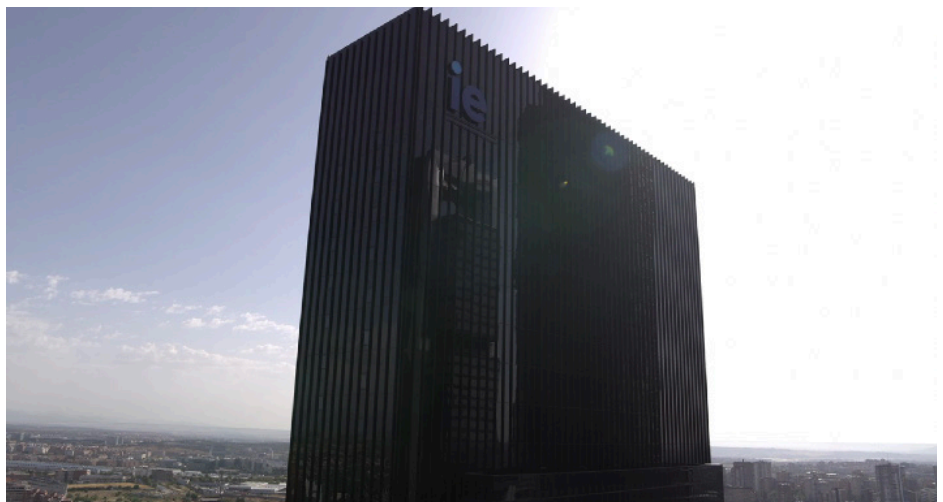
Located in one of Europe's top business hubs, IE University's newly inaugurated IE Tower in Madrid is 32 storeys high and can accommodate 6,000 students and 1,000 staff in 60 classrooms broadcasting lessons in real-time. Responsible for leading IE University's IT team is Chief Information Officer Carlos Garriga. Garriga oversaw the deployment and, having held CIO positions for the past 25 years, brought with him a wealth of experience managing large transformation projects in a range of industries including wholesale distribution, aerospace, banking, real estate and education.

Challenge

The IE University's Tower is a benchmark in innovative education and as such required a world-class, reliable and stable campus network.

Like many of their peers in higher education institutions, Garriga and his team faced the challenges of providing remote access to IE University's student population throughout the Covid-19 pandemic. Ensuring that students were able to attend lectures and tutorial sessions virtually placed much higher demands on IT resources.

Coming out of the pandemic, the requirement for a hybrid model of face-to-face and virtual learning remained, and has now become an integral part of the university's programme, with critical technical requirements for a high-bandwidth and low latency network infrastructure.



IE Tower, Madrid

Results

- Network deployed on time within tight deadlines with validated configurations
- Operations teams have full visibility and control of the network
- IE University Tower's campus network has been in production for a full academic year and performed exceptionally for both students on-site and for those connecting remotely

The Solution

The university went out to tender with the top networking vendors with Wi-Fi access technology, and after a careful assessment of solutions, IE University selected Arista.

The university was impressed by Arista's vision of a single, consistent software platform with open, industry-standard protocols. This includes open APIs, programmability of every layer, cloud automation, self-service Zero Touch Provisioning, and a standards-based Universal Cloud Network (UCN) deployment architecture.

As Garriga says, with more than 400 access points and a significant number of switches to deploy, Zero Touch Provisioning was seen as a particularly attractive feature as it meant they could have all configurations set up and validated in advance, so when the hardware was delivered, setup took a matter of minutes thanks to automated asset discovery.

Another important feature was Arista's CloudVision platform: 'We have real-time visibility of everything that is happening in the network and we are able to change configurations on the spot,' explains Garriga.



AP-C260

Conclusion

IE University was able to install and test an extensive and complex network, spanning 32 floors and delivering Wi-Fi to 7,000 students and staff, working within an incredibly short deadline of six weeks, before the building opened to students and staff.

As part of the process, the university performed a number of proof-of-concept tests which included stress testing the system under high loads. Despite exceeding what they considered to be the maximum load by a considerable margin, the network infrastructure passed with flying colours.

Garriga admits that as part of prudent planning, they had not only developed Plan A but also a Plan B and a Plan C to ensure they would be able to deliver the network infrastructure demanded by the campus. However, he is pleased to report the contingency plans remained untouched as Plan A was a success.

Following the successful deployment at IE Tower, the university is now looking to deploy Arista technology in its other campuses outside of Madrid. Of particular interest to Garriga and his team is Arista's Network Detection and Response (NDR) solution that, powered by AI technology, detects threats in the network and ensures a swift response.

Garriga praises the support they have received from Arista, working closely on everything from product selection and network planning to logistics and timelines, 'We felt the support of Arista from the very beginning, their engineering team, their partners, they've been with us in the different phases of the project.' Garriga concludes, 'The support from Arista's team was outstanding.'



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