

University Introduces Flexible Wireless-Based Facilities

Customer Case Study



Cisco Unified Access technology allows University of Granada to provide better connectivity securely and more easily

EXECUTIVE SUMMARY

Customer Name: University of Granada

Industry: Higher education

Location: Spain

Number of Employees: 7000

Challenge

- Make campus connectivity flexible to meet needs of today's students
- Centralize management to reduce costs
- Enhance educational delivery

Solution

- Cisco Unified Access platform with Cisco Prime, converging management of wired and wireless domains and introducing context-based policies

Results

- Handled 160 percent year-on-year increase in wireless network traffic
- Delivered BYOD access to endpoints from almost 400 manufacturers
- Created platform for development of new services

Challenge

The University of Granada is one of Spain's top five universities by size, with seven physical campuses comprising around 80 buildings, including African campuses located in cities of Ceuta and Melilla. The university's IT department (CSIRC) plays a key role in enabling this connected research and learning environment, which serves about 75,000 users.

Despite a fall in government funding, growth in network traffic and demand from users for more bandwidth are constant challenges. This situation is compounded by the proliferation of mobile devices among students and faculties. To address these issues, the university embarked on an overhaul of its wired and wireless infrastructure, driven by the University of Granada IT Delegation.

Solution

Following a technology review, the university chose a Cisco® Unified Access network. Antonio Ruiz Moya, head of communications and network services, at the University of Granada, says: "The Cisco option offered the most stable, scalable, and reliable solution."

About 1000 Cisco Aironet® 3700, 3600, 2600, and 1600 Series Access Points were connected to a fixed network core consisting of Cisco Catalyst® 6500 Series Switches with the Supervisor Engine 2T providing a Virtual Switching System environment. Cisco Prime™ Infrastructure has consolidated mobile and fixed management tools and converged workflows. The access points are managed centrally by Cisco Wireless Services Module units, configured for high availability, while security is through a Cisco Wireless Intrusion Prevention System.



“Additionally to eduroam services, people who have invited guests onto campus can set up accounts for them securely and quickly.”

Antonio Ruiz Moya
Head of Communications and Network Services
University of Granada

Results

The University of Granada’s Ceuta campus was the first in Spain to deploy access points with 802.11ac capabilities, boosting significantly the university’s ability to wirelessly extend video and data-intensive learning tools beyond the classroom.

Cisco Unified Access has helped the University of Granada cope with a 160 percent year-on-year increase in wireless network traffic. This device-agnostic environment also enables bring-your-own-device (BYOD) roaming across campus, using context-based policies to support endpoints from up to 400 different manufacturers in its first year of operation.

The University of Granada is a member of eduroam, a secure worldwide access service developed for the international research and education community. At the last count, representatives from some 20 percent of the 6000 establishments belonging to the community had accessed the network using the university’s wireless platform. “Additionally to eduroam services, people who have invited guests onto campus can set up accounts for them securely and quickly,” says Ruiz Moya.

The University of Granada is also using the location-based capabilities of the wireless network running on Cisco MSE to develop an immersive environment called Bring Your Own University, which highlights educational activities taking place close to each user around the campus.

For More Information

To learn more about the Cisco architectures and solutions featured in this case study go to: www.cisco.com/go/wireless

Product List

Wireless

- Cisco Aironet 1600, 2600, 3600, and 3700 Series Access Points
- Cisco Wireless Services Module
- Cisco Catalyst 6500 Series Switches with Supervisor Engine 2T
- Virtual Switching System
- Cisco Prime Infrastructure
- Cisco Wireless Intrusion Prevention System
- Cisco Mobility Services Engine



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