

Building Next-Generation Education Environment

Universidad de Santiago de Chile creates new ways to learn, teach, and grow.

Customer Name: Universidad de Santiago de Chile

Industry: Higher Education

Location: Chile

Number of Employees: 18,000 students and 3500 staff

Business Impact

- Building services around learners, and reducing administrative burden for teachers
- Making educational content and tools more accessible to increasingly mobile students
- 40 percent reduction in telephony costs, plus ability to accelerate national research ambitions



Case Study

Business Challenge

As one of the country's largest state universities, Universidad de Santiago de Chile (USACH) knows all about the need for transformation. Like many publicly funded institutions, it has been "doing more, with less" for some time, while looking to create new revenue streams from business and community partnerships, distance learning and international student exchange programs, and research activities.

Collaboration is central to furthering these ambitions. USACH connects to Red Universitaria Nacional (REUNA), Chile's national research network, enabling scientists, researchers, educators, and students to share ideas, information, and learning with maximum efficiency and effectiveness. The university also recognizes the importance of reducing the administrative burden for lecturers, and adapting to an upwardly more mobile and web-enabled student population.

Maximizing these opportunities was very difficult. Although USACH had acquired a lot of technology, its relatively small IT team, Servicio de Gestión Informática y Computación de la Universidad de Santiago de Chile Limitada (SEGIC), spent most of its time managing a large estate of private branch exchange (PBX) phone systems and reacting to network issues. "Security was a big problem," says Jorge Villalon, IT general manager for SEGIC. "Students and visitors would bring in their own mobile devices and infect the campus network, slowing down performance for all users, in some cases, even causing crashes."

Solution and Results

To realize its vision, USACH chose a design based on [Cisco® Borderless Networks Architecture](#). This converged infrastructure of Cisco Catalyst® 6500 and 4500 Series Switches and 180 wireless access points has created one connected learning environment, linking together nine faculties spread across a 79-acre main campus and satellite sites with secure, anytime access to education and IT services. The addition of Cisco Network Admission Control has provided greater control over endpoints and network traffic.

Student self-service has replaced the need to contact lecturers for basic enquiries. Working on-campus, wirelessly, or via remote access, students can go online to hand assignments in, complete registrations, make online payments, submit grant applications, conduct library book searches, and fill in classroom surveys. With over 80 percent of users receiving Gigabit Ethernet to the Desktop, browsing experiences and application response times have improved significantly.

As well as supporting REUNA initiatives, such as IPv6 addressing, grid computing, and virtualized research, the new network has enabled the introduction of an IP Contact Center and IP telephony for 5000 users. "Now when lecturers move around the campus, they can take their IP phones with them. The system is centrally managed and, by routing calls over the

campus network, has reduced our telephony bill by around 40 percent," says Cristian Rojas, networking and communications manager for SEGIC.



"Taking a holistic approach using pre-validated Cisco's Borderless Network architecture means we can deploy new collaborative services, such as TeleMedicine and IP video surveillance, faster, and more cost-effectively, because we have complete integration of routing, switching, security, and wireless components."

Jorge Villalon
IT General Manager, SEGIC

For More Information

To learn more about Cisco solutions for education, please go [here](#)

For more information on Cisco Borderless Networks, please go [here](#)

For more information on Cisco Collaboration Strategies, please go [here](#)