Overview

COLUMBUS STATE UNIVERSITY (CSU), part of the university system of Georgia, has two campuses about 100 miles from Atlanta. More than 8,400 students attend the university and many live in residence halls.

“Today, Wi-Fi is the only way that most campus users connect,” says Casey Hergett, CSU’s senior manager of database and infrastructure services. “So it’s extremely important that we provide a great experience.”

However, old buildings with thick walls present challenges. The previous Wi-Fi networks — one on each campus — had coverage gaps. They were slow and unreliable. They lacked the capacity to support more mobile devices, more frequent connections and more use of video and other demanding applications.

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CASEY HERGETT, SENIOR MANAGER OF DATABASE AND INFRASTRUCTURE SERVICES, COLUMBUS STATE UNIVERSITY

High Density? Thick Walls? No Problem

CSU COMPARED SIX LEADING WI-FI SOLUTIONS by setting up test networks in crowded areas such as the library. “Xirrus quickly rose to the top,” says Hergett. “[There are] different access points (AP) for different types of buildings and capacity needs. It’s the easiest to deploy and has the capacity to provide a great experience in lecture halls and other high-density environments.”

Today, CSU has a single Wi-Fi network spanning both campuses. The Xirrus network covers approximately two million square feet, including residence halls, classrooms, the library and cafeterias.

“By providing dependable connectivity everywhere, Xirrus [equipment] makes Wi-Fi a utility,” Hergett says. “Usage surged after we switched to Xirrus [Wi-Fi].” Students connect to do coursework from residence halls, libraries and classrooms. Faculty and staff appreciate being able to view calendars, check email and take notes from anywhere on smartphones and tablets.

“One year after [Xirrus Wi-Fi] went live, I’m a firm believer — both in product quality and technical support,” says Abraham George, CSU vice president of IT and CIO.

Faculty Use Wi-Fi to Engage Students

FACULTY TAKE ADVANTAGE OF THE XIRRUS WI-FI NETWORK for instruction. Some professors open class by polling students — a way to get them thinking about the topic and take attendance at the same time. Others administer a quiz at the beginning of class to assess students’ knowledge so they can tailor the lecture accordingly. “All students in our 230-seat lecture hall can connect at the same time — with a good experience,” says Hergett.
IT Can Quickly Adapt the Network as Usage Changes

A GROWING PORTION OF CAMPUS USERS own newer mobile devices that can operate over either the 2.4 GHz or 5 GHz band. Connecting them to 5 GHz radios improves the experience for everyone. “Xirrus makes it simple to adapt to the ebb and flow of devices on our campus from day to day and even hour to hour,” Hergett says. During events, the IT team can see what types of devices are connecting and reprogram radios from 2.4 GHz to 5 GHz and back again with a few clicks. When the university hosts concerts or other events, the IT team quickly adds APs by using Xirrus Rapid Deployment Kits, which include a tripod, mounting kit and cables.

Delivering Great Wi-Fi Experiences Takes Little IT Effort

NO EXTRA EQUIPMENT sits in the data center and management is simple. “Xirrus Management System gives us the information and tools to make sure that applications perform great on different types of devices,” Hergett says. “It’s a one-stop shop for everything: troubleshooting, configuration and gathering statistics.” As a result, helpdesk calls about Wi-Fi decreased drastically.

Demanding activities like streaming video and iOS updates no longer slow down the network. Hergett explains by telling a story: “Apple released a major iOS update before we had switched to Xirrus [Wi-Fi]. On the first day the update was available, every campus iPhone started the 1 GB download, bringing the network to its knees. Now, we have absolute control over how applications behave. iOS updates and streaming video no longer slow down the network, and it’s thanks to Xirrus Application Control.”

Hergett concludes, “With Xirrus, Wi-Fi has become a utility. It’s stable, fast and reliable. Faculty and students are using it in creative ways we didn’t anticipate, contributing to academic success.”