Country's largest 4-year university expels Cisco, saves $100 million

California State replacing 3,316 switches with Alcatel-Lucent gear

By Jim Duffy, Network World
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A decision to oust Cisco in favor of Alcatel-Lucent is saving California State University $100 million.

Cal State is embarking on an eight-year project to refresh its 23-campus 10G network with thousands of Alcatel-Lucent OmniSwitches, which will replace 3,316 Cisco Catalyst switches. The cost of the project is $22 million, but would have been $122 million had CSU stuck with Cisco, says Michel Davidoff, director of cyberinfrastructure at CSU.

"It was a no-brainer," he says.

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Cisco said it had no comment on the CSU claim..

Cal State Fullerton is one of 23 networked CSU campuses.

CSU is replacing Cisco Catalyst 6500, 4500 and 3750 switches with Alcatel-Lucent OmniSwitch 6900s, 6850s and 6450s. The university evaluated equipment from HP, Juniper and Brocade as well.

"Since 2001, 2002, for the routing and switching component, we have been a Cisco shop," Davidoff says. "Fast-forward 10 years ... sometime in the past year, 18 months we decided to either renew with Cisco or select a new vendor."

CSU embarked on the project to make sure the campus networks are current, and that they meet the requirements and objectives of academia and administration. Functional requirements included operational simplicity, low total cost of ownership (TCO), minimal operating systems and command line structures, and a commitment to standards.

Moving operations personnel off of 10 years of running Cisco IOS and becoming accustomed to those command line structures was going to be a tough sell, Davidoff admits. But when Cisco's response to the CSU RFP came in $100 million higher than Alcatel-Lucent's, the sell became much easier.

"I knew I would have a tough time convincing all of the CIOs -- 23 of them," Davidoff says.

"Since we had such a big investment in Cisco I knew I would have a major challenge convincing all of them. But nobody fought with me that $100 million is worth keeping Cisco for." [From the archives: "Cisco's John Chambers answers his critics -- What premium pricing?"]

CSU is the largest four-year university system in the United States. Its network is used by almost 430,000 students and 44,000 faculty and staff across 23 campuses, which stretch from Humboldt, Calif., to San Diego.

CSU sought to standardize on a single vendor and operational infrastructure for its IT, Davidoff says. It will also enable CSU to add hybrid public/private cloud computing over time, to make operations more efficient and less costly.

The OmniSwitch 6900s will serve as the core and data center switches at all 23 campuses. The 6850s and 6450s will be on-ramps to the 6900 10G core, Davidoff says.

The network is simple, Davidoff stresses. It will be supporting common business and administration applications, such as HR, finance, student/faculty/staff administration, and Web surfing for the students. It, for now, is not supporting any sophisticated virtual machine mobility or software-defined networking capabilities.

"There is nothing fancy to what we are doing," Davidoff says. "We are using pure Layer 2 with its security and high availability features -- redundancy, load balancing. It doesn't sound sexy.

"CSU's job is to train the workforce in California," Davidoff adds. "UCLA, Berkeley, their mission is research and development. There's very little research done at CSU."

That said, CSU is experimenting with OpenFlow to gather analytical data to see if it can make its 10G links more efficient, Davidoff says.

According to an Alcatel-Lucent study of more than 6,000 enterprises, 45% of educators said they would prefer to use cloud-based solutions that allow multiple devices to access data independent of where it's located, rather than having the application tied to device specific storage.

Alcatel-Lucent landed a major private cloud win with Illinois' Advocate Health Care earlier this year. That project also replaces a Cisco infrastructure.

Four campuses are expected to complete the transition to Alcatel-Lucent OmniSwitches over the next year.

Jim Duffy has been covering technology for over 25 years, 21 at Network World. He also writes The Cisco Connection blog and can be reached on Twitter @Jim_Duffy.

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