CAPE COD COMMUNITY COLLEGE REACHES FOR THE CLOUDS WITH COMCAST BUSINESS ETHERNET

SITUATION

- Two-year community college needed to improve Internet access; support growing volume of devices on the network

CHALLENGE

- Add capacity to improve student access to academic resources; facilitate IT access to cloud resources
- Establish fast, reliable Internet connection that can easily scale
- Manage operating expenses

SOLUTION

- Comcast Ethernet Dedicated Internet

RESULTS

- Reliable, high-performance Internet service
- Cost-effective, scalable connectivity
- Reduced operational expenses
- Flexibility to implement new remote academic programs

Fiber-based Internet service saves college money and provides 16X more capacity; scalable network enables access to critical cloud-based resources

CAPE COD'S ONLY COMMUNITY COLLEGE DEPENDS ON INTERNET TO SERVE INCREASINGLY CONNECTED STUDENT BODY

Cape Cod Community College was established in 1961 on 116 acres in West Barnstable. Today, it also operates a satellite campus in Hyannis. It is the only higher education institution on the Cape, and serves 4,000 students with 325 full and part-time faculty and staff.

Cape Cod Community College is a 100 percent commuter school. It depends on Internet access to assist with administrative operations and classroom connectivity, and also to accommodate the increasing number of students who bring their smartphones, laptops and other portable devices to school.

Beyond academics, the school also is a community anchor that relies on Internet access to support joint educational initiatives with Cape Cod high schools.

COSTLY COPPER CONNECTION LACKED SPEED, SCALABILITY TO SUPPORT DEVICE PROLIFERATION; INCREASED DEPENDENCE ON CLOUD SERVICES

With 1,000 wired campus PCs, and thousands of additional mobile devices connecting to the campus network each day, Internet performance was not meeting demand on the college's 30 Megabit per second (Mbps) copper connection. At the same time, the college was evaluating the cost benefits of moving some of its administrative and operational functions, including business-critical functions like data backup, to the cloud. It became clear that the college needed to replace its legacy Internet connection with a fiber-based Internet service to achieve greater performance and gain additional capacity, yet cost was a critical consideration.

"Academic IT departments face many of the same operational challenges as corporate IT departments – we have to manage computers, host email, backup data, and make sure the network is secure," said Greg Banwarth, Chief Information Officer for Cape Cod Community College. "All of these jobs require resources, and the cloud holds a lot of promise for managing associated costs. But without a scalable, high-performance Internet connection to the cloud, it is not possible to reap those benefits."

COMCAST
BUSINESS

> *"We are now able to provide our students – and our community – with services that we never before thought possible."*

Greg Banwarth
Chief Information Officer
Cape Cod
Community College

COMCAST DELIVERS SCALABLE, ETHERNET-BASED INTERNET SERVICE AND A 16X BOOST IN CAPACITY FOR A COMPARABLE PRICE TO COPPER-BASED SERVICE

After a thorough review process, Cape Cod Community College selected Comcast Business fiber-based Ethernet service because it was affordable and reliable, and Comcast had a proven track record. Though the college initially discussed installing a smaller connection, it was evaluating a number of new, remote educational and community outreach programs and was excited at the possibilities a high-performance Internet connection could support. Comcast subsequently installed a 500 Mbps Ethernet Dedicated Internet (EDI) connection for a comparable price to what the college had been previously paying for its copper lines. With a 500 Mbps circuit, the 16X boost in capacity has enabled the school to migrate many of its administrative and operational applications to the cloud, providing a savings in technology expenses.

For example, the college recently migrated its academic email service over to Microsoft Office 365. With the cloud-based email solution, Cape Cod Community College now can offer its students email boxes with more capacity at less cost than when it was managing email services internally, and it frees up its IT staff to focus on other projects. The additional Internet capacity also allows the college to take advantage of cloud services for data backup. Whereas it would typically take up to a week to retrieve traditional tape backups from an offsite location, the school now is able to access its data within only a few hours from Amazon Web Services.

"On our old 30 Mbps connection – which cost approximately the same as our new 500 Mbps connection from Comcast – our backup process alone would take days. By the time we'd be finished, it was time to start back up again. With Comcast, it takes hours," said Banwarth.

Cape Cod Community College also has plans to use its Ethernet Dedicated Internet service to support a new Virtual Desktop Infrastructure (VDI). Set to launch in late 2013, the VDI service will run over the Comcast backbone and allow Cape Cod Community College students to access bandwidth-intensive educational applications over the Web. Students simply can download the application on their device of choice, log into the college's servers, and then obtain access to virtual computer labs and programs like AUTOCAD remotely, saving them the time and cost of commuting. The college also is considering an expansion of the planned VDI program to include area high schools to facilitate joint academic initiatives. Additional plans to enable remote access for students, along with new video conferencing capabilities for a satellite Registered Nurse program on Martha's Vineyard, are also underway.

Banwarth added, "Having this extremely fast and reliable fiber-based Ethernet service from Comcast allows us to look at our business in an entirely new way. We are now able to provide our students – and our community – with services that we never before thought possible."