

## New York’s Largest Community College Enhances Collaboration

Suffolk County Community College Delivers secure communications and collaboration over reliable and flexible network.

EXECUTIVE SUMMARY
<p><b>SUFFOLK COUNTY COMMUNITY COLLEGE</b></p> <ul style="list-style-type: none"> <li>• Higher Education</li> <li>• Long Island, New York USA</li> <li>• Over 27,000 students; over 2500 faculty</li> </ul>
<p><b>BUSINESS CHALLENGE</b></p> <ul style="list-style-type: none"> <li>• Independent, aging private branch exchange (PBX) phone systems at several campus locations</li> <li>• Lack of robust redundancy system</li> <li>• Budget and staff decrease, coinciding with influx in student enrollment</li> </ul>
<p><b>NETWORK SOLUTION</b></p> <ul style="list-style-type: none"> <li>• Leverage college’s existing data network to deliver secure communications and collaboration over reliable and flexible network</li> <li>• Interconnect phones for communications, billing, dialing plans, and basic features</li> </ul>
<p><b>BUSINESS RESULTS</b></p> <ul style="list-style-type: none"> <li>• Consolidated network under one centralized management system and file storage</li> <li>• Faster response times for campus personnel for safer campus environment</li> <li>• Ability to host web-based applications to improve campus administrative processes</li> </ul>

### Business Challenge

Suffolk County Community College (SCCC) is a comprehensive studies community college that is part of the State University of New York system in Long Island, New York. The largest community college in New York, SCCC is a multi-campus college that offers more than 65 degree programs, including liberal arts and business, graphic arts, veterinary science, engineering and technology, health and human services, nursing, education, computer technology, and communications, to name a few. Approximately 27,000 student body members are distributed over 900 square miles, consisting of three principal and two satellite campuses.

Each of the three main SCCC campuses had an independent Avaya private branch exchange (PBX) phone system that lacked a robust redundancy system. Although students, faculty, and administrative staff could make intercampus calls, the independent systems lacked centralized management. “If one piece of a campus’ system failed, the entire network at that location would

crash,” says Richard Johnston, director of networking and telecommunications for Suffolk County Community College. “While we understood that each campus needed to work independently, the potential for a system failure was too large, and the challenges surrounding decentralized management became too much to bear.”

As the Avaya products neared end-of-life in 2005, SCCC’s IT staff opted to switch over to a voice over IP (VoIP) system that provides a much needed upgrade to the legacy system and creates a comprehensive network that spans each campus and connects the college as one unit.

Due to financial pressures over the last 10 years, the networking and telecommunications budget for SCCC dropped approximately 25 percent, and the college’s IT staff was down to seven people. “We don’t have the funds to continue replacing and growing our network, so we needed to invest in equipment that was 100 percent reliable and flexible and had a product line that was easily extendable,” says Johnston. “In hard economic times, such as now, community colleges tend to increase in enrollment. As we saw an influx in students, our budget became limited, and we were

forced to do more with less. Additionally, we felt the pressure to address issues associated with an economically challenged campus population. Our technology needs to be free of cost and easy to use, as most of our students do not have computers at home.”

SCCC looked to Cisco to deploy VoIP and a comprehensive unified communications infrastructure throughout the campus.

## Network Solution

The Cisco® Unified Communications infrastructure leveraged SCCC’s existing data network to deliver secure, smooth communications and collaboration over a reliable and flexible network. The network is the platform upon which the college’s access, presence, mobility, data centers, security, and policy management operate. “We installed a full VoIP solution using Cisco equipment for the college’s voice and data backbone. The Cisco® IPCC system integrated well with existing architecture and allowed for the call control and flexibility in programming necessary to address the current and future needs of the college,” says Steve Clark, coordinator of instructional technology, Suffolk County Community College. “The system is scalable and upgradeable which will address the growth necessary in our institution.”

Additionally, moving approximately 1800 phones and users from a PBX phone system to a VoIP data network inevitably reduces expenses, because campus calls travel over the data network rather than a phone company’s network. The deployed technology also includes the interconnection of phones for communications, billing, and dialing plans as well as basic features such as conferencing, transfer, forward, and hold.

SCCC handles almost all aspects of equipment management, troubleshooting, and configuration in-house. “Moving to this platform made network supervision much more manageable and increases the IT staff’s collaboration tools and knowledge base. We can handle more data, voice, audio, video, and security functionalities; however, I know that, if necessary, I can call Cisco at any time, and they will find an expert that can help in the event we need their assistance,” says Johnston.

## Business Results

SCCC has seen great benefits since the deployment of Cisco’s unified communications technology. Instead of several independent systems scattered throughout the campus, the network is

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— Steve Clark, Coordinator of Instructional Technology, Suffolk County Community College

consolidated into one centralized management system with multiple subscribers. “Cisco gave us redundancy, availability, central management, and independent working,” says Johnston. “Now, if one area’s network fails, another campus can seamlessly pick up the traffic.”

“The IPIC system allows for sophisticated call routing that is customized for our environment,” explains Clark. “We now receive conditional call routing, agent mobility and easier management of customer satisfaction. Supervisors are able to monitor agent productivity, trend call volume and access historical reports to determine the effectiveness of the system. All of these features are instrumental in providing the right solution for our customer base.”

Clark continues, “In the past, we inefficiently handled calls leading to lack of information delivery, multiple call transfers and placing customers into a voicemail system. This method wasted time that our staff could have used to service our customer base. Once we moved to a unified Student Service Call Center productivity and efficiency was reflected immediately by the number of calls answered compared to the total call volume.”

The college can also use the unified communication technology telephony and as an emergency response system. Officials can deliver mass notifications via audio and text to campus phones without using an overhead paging system, resulting in fast, immediate action. The college is also leveraging the Cisco e911 system. “In the past, if a student or faculty member had called 911, the only way the college would know about it was by looking out the window and seeing patrol cars,” says Johnston. “With the unified communication system, we have created faster response times for campus personnel in the event of a disaster and are providing a safer environment for the campus populace.”

From an administrative side, SCCC now has centralized file storage for employees and has the ability to host web-based applications that improve campus administrative processes and streamline both the day-to-day management and ongoing maintenance of the college. Faculty and staff can securely log-in to the campus’ network via a virtual private network from anywhere in the world, generating 24-hour access to information.

SCCC is also leveraging the upgraded network to transport high-quality, live audio and video data

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•	Cisco 2800 and 3800 Series Integrated Services Routers
<b>Security and VPN</b>	
•	Network Access Control (NAC)
<b>Voice and IP Communications</b>	
•	Cisco® IPCC
•	Cisco Unified Communications Manager
•	Cisco Unity®
•	Singlewire InformaCast

throughout the campus, thus enhancing the educational experience offered to students. “Most classrooms and professors are making good use of the upgraded voice and data network,” says Clark. “We are seeing greater usage of network-based applications and computers in classrooms. We are able to broaden our ‘smart classrooms’ to include podiums, SMART Boards, projectors, PCs, and audio/video players. We have allowed for greater network connectivity that truly enhances classroom learning.”

Clark continues, “In my classroom, I encourage students to present to the entire class from their personal computers to spur dialogue and collaboration. Our switches can now handle advanced applications and take up less rack space, so the college can continue to give teachers the tools they need to do their job better.” SCCC teachers are more available to their students and other faculty members as they are able to connect online or via the internal phone system faster. Also, the Internet presence of the college has increased by several hundred percent. “I have been at Suffolk County Community College for 12 years, and today we are doing much more technologically with much less money,” says Clark.

### Next Steps

Clark has installed an active student services call center on the eastern campus of SCCC, and his next project is to convert this into a college-wide “All Student Services” call center. “In an effort to provide better services to our students and their families, we would like to merge all department and campus call centers into one easy-to-manage campus-wide center that is both physical and

virtual,” says Clark. “We would be able to leverage our staff more efficiently and help field the 80,000 calls received monthly about enrollment, graduation, classes, etc.”

### For More Information

To find out more about Cisco’s higher education unified communications solutions, go to:  
[http://www.cisco.com/web/strategy/education/uc\\_for\\_higher\\_education.html](http://www.cisco.com/web/strategy/education/uc_for_higher_education.html).



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