**EDUCATION SUCCESS STORY**

Prestigious American College Received Royal Treatment with a ShoreTel UC Solution to Modernize Campus Collaboration

The College of William and Mary prides itself on being not just one of the very oldest institutions of higher learning in America, but also one of the top ranked universities. The school has a royal pedigree—it was chartered by King William III and Queen Mary II of England in 1693—and a rich history of providing educational excellence. It also has a reputation for being very modern and very forward looking. In fact, Intel named William and Mary one of the top 50 most “unwired colleges” for its campus-wide wireless network.

What is not so savvy at the College of William and Mary is its telephone system. Practically ancient, the PBX and voice mail system were installed in the 1980s, reached end-of-life in the mid 1990s, and end-of-support at the turn of the new century. To keep things up and running, the college IT department relies on a third-party vendor with a stockpile of parts that were scavenged off old equipment and two external technicians who handle the daily administration and maintenance of the PBX setup. Reliability of such an old system was becoming questionable, and the college was concerned about outages across voice communications, which are critical to the school’s operations. Also, the college was required to comply with emergency communication (E911) mandates and wanted to upgrade in alignment with new building projects.

“A traditional PBX is a monolithic array of boxes sitting in a computer room with cabling and outside connections to the public telephone network. If we ever had a problem with that facility, we would lose phones for weeks or months,” says Courtney Carpenter, chief information officer for the College of William and Mary.

**SOLUTION:**
- The College deployed ShoreTel solutions including: ShoreTel Voice Switches, ShoreTel IP telephones, ShoreTel Enterprise Contact Center, ShoreTel Communicator, and 3,700 licenses.

**BENEFITS:**
- The ShoreTel UC system overhauled campus telephony interactions by replacing an 8,000-line legacy PBX phone and voice mail system with state-of-the-art VoIP technologies, E911, softphone capabilities and unified messaging.
- ShoreTel IP Telephone 655 provides an application-ready platform with next-generation capabilities to further extend call efficiencies, including conference bridge management, visual voice mail, patent-pending microphone technology and haptic feedback.
- ShoreTel Communicator provides brilliant simple collaboration tools accessible from the desktop to vastly expedite call handling, expand communications opportunities, and streamline workflow activities for greater visibility and productivity.

One of the oldest US colleges matriculates to modern IP telephony with a ShoreTel UC Solution to boost reliable voice communications and ease of use.

**CHALLENGE:**
- The College of William and Mary had an old PBX telephone system that used scavenged parts and needed third-party technicians to keep it running.

To head off potentially significant phone issues, Carpenter set out to find a new IP telephony solution. His team issued a request for proposal (RFP), inviting responses from more than a dozen...
ShoreTel and The College of William and Mary

vendors representing all of the major telephone system manufacturers. “We were focusing mostly on larger systems—we had about 8,000 lines—that could ensure redundancy and high availability. The new solution would need to be easy to deploy and manage and use, and we really wanted next-generation technology for a higher grade of communication and collaboration across the institution,” Carpenter says.

The IT team originally was not considering ShoreTel as a serious contender. “Honestly, we had a perception that ShoreTel was more for smaller organizations. But we had an open mind as we went through the (RFP) process. And after two months of testing, we went with ShoreTel through our unified communications partner IPC Technologies,” he adds.

The reasons he cites for choosing ShoreTel include resiliency of the IP technology, its distributed architecture, ease of use and scalability. Carpenter mentioned the ShoreTel IP telephones themselves as another reason for the school’s selection. “We recognized that the phone sets are what end-users see. As we narrowed down our vendor choices, we actually put up test systems for the finalists and had a group of about 80 users come through and test the phones. Overwhelmingly, they liked ShoreTel’s. The instruments are intuitive, easy to use and well made,” Carpenter continues.

A ShoreTel Unified Communications Solution would be able to replace the College's aging PBX system with advanced VoIP technology that cohesively extends phone services and collaborative tools. “ShoreTel’s tagline is ‘brilliantly simple’ — and it really is. Some of the phone systems we reviewed were really complicated, but setting up and managing the ShoreTel system seems very straightforward. You don’t need weeks of training just to figure it out. That was a big plus,” he details.

Crowning VoIP Resiliency with a ShoreTel UC Solution

The College of William and Mary implemented a ShoreTel UC Solution that includes ShoreTel Professional Communicator, ShoreTel Enterprise Contact Center, and more than 3,000 ShoreTel IP telephones. The new system will provide expanded phone services to all College constituents by leveraging modern VoIP technology including desktop software for managing calls and access to voice mail to email. With VoIP, the phones plug into a network jack instead of the telephone jack, and voice is converted to a digital signal for transmission.

The solution calls for all College staff members to receive a new ShoreTel desk phone and the option to use Professional Communicator to manage calls, voicemail and personal system settings from the desktop. Communicator creates a softphone on the desktop, enabling users to interact with a display panel and buttons and use in conjunction with a headset to rapidly connect, route and gain visibility about incoming calls and prior call history. ShoreTel systems unify and greatly simplify messaging with the integration of voicemail, email and calendars into a single interface, including Microsoft Outlook and Active Directory.

The ShoreTel IP telephones at the College include models IP 115, IP 230 and the much-anticipated IP 655. All ShoreTel telephones employ feature-rich displays and functionality, and the latest desktop IP Telephone 655 combines elegance with an application-ready platform for advanced tools, such as conference bridge management, visual voice mail, presence, and even weather alerts. The IP 655 also is using: patent-pending microphone technology that provides exceptional circular audio quality; haptic feedback technology for human-computer interaction believed to improve efficiency and error rates; and an intuitive interface for easily managing conference calls.

In addition to the many new productivity features, William and Mary implemented the 911 Enable Emergency Gateway, a ShoreTel certified E911 solution. 911 Enable, a ShoreTel Innovation Network Partner, specializes in E911 solutions for IP telephony, serving businesses, service providers, telematics, and relay centers. The application enables the college police department to instantly identify the location of any phone on campus from which an emergency call is placed. This safety enablement meets federal emergency 911 requirements and will help

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William and Mary safety personnel to quickly respond and coordinate urgent situations.

The ShoreTel system uses distributed IP architecture with N+1 redundancy and no single point of failure for built-in disaster recovery, plus 99.999 percent availability for mission-critical business continuity at William and Mary. ShoreTel Voice Switches bolster reliable call management across the school’s network. The college is using Voice Switch models 24A, 220Ti and T1k. “Because the ShoreTel system is distributed in various data centers around campus, we reduce risk. Plus we can bring in multiple connections to the public telephone network to make it even more resilient,” Carpenter explains.

Learning the Benefits of Simplified University Communications

With the expert help of IPC Technologies, the College of William and Mary launched its ShoreTel system. IPC created a test bed and synced the old PBX system with ShoreTel. “We did not want to do a flash cutover of all phones. We wanted to roll it out over several months. At the same time, we wanted to maintain five-digit dialing between endpoints, so the two systems had to talk to each other seamlessly. That was a challenge, given that our system is so old, but IPC made it happen. We really enjoy working with IPC—that was definitely part of the decision as well. They are providing our long-term support and we are very comfortable with their capabilities,” comments Carpenter.

The college had a requirement for 3,700 licenses for this large ShoreTel deployment. “ShoreTel’s straightforward licensing structure was also appealing. A basic license covers most everything you need except for call center applications. And ShoreTel had the best price point by far. We got the price we wanted and our first choice from a technology standpoint. Everything came together,” he furthers.

The college will be rolling out its Enterprise Contact Center deployment soon. Enterprise Contact Center will allow the college to further customize call routing, outbound campaign features, and expand communication outreach activities. With highly automated productivity tools that enable users to instantly access voice, video and instant messaging, the college gains an opportunity to simplify how call activity is managed, monitored and better integrated into the daily workflow.

At the end of the day, the College of William and Mary received the royal treatment from its VoIP partners. “We are very happy with our selection of ShoreTel technologies and the support from IPC. From RFP evaluation to full campus roll out, we’ve been very pleased with the truly smart, simple architecture, manageability and intuitive user features. I guess we’ve come out of the PBX dark ages in a grand way,” concludes Carpenter.

About ShoreTel

ShoreTel is a provider of business communication solutions whose brilliantly simple unified communications platforms, applications and mobile UC solutions promise a new rhythm of workforce engagement and collaboration. With costly complexity eliminated by design from its award winning, all-in-one IP phone system, UC and contact center solution, and its industry leading hosted business phone system, workers enjoy a freedom and self-reliance that other providers can’t match. Users have full control to engage and collaborate, no matter the time, place or device, for the lowest cost and demand on IT resources in the industry. ShoreTel is headquartered in Sunnyvale, California, and has regional offices and partners worldwide. For more information, visit shoretel.com or shoretelsky.com