

CORNELL UNIVERSITY



THE CHALLENGE

The eight full-time Telecommunications Officers in Cornell University's Police Department call center never know what they'll find on the other end of the line. From 9-1-1 emergencies such as injuries, burglaries, and fires, to calls about parking and the occasional misdialed number, the 16 incoming phone lines are never idle.

As a public safety answering point (PSAP) for the 745-acre, 260-building campus, the call center was handling 9-1-1 calls using an aging, proprietary software system. In fact, it worked well and delivered the right 9-1-1 caller location information down to the room number in a building. But they didn't know how long the system would last. When it came to protecting the campus population and managing emergencies quickly, accurately, and efficiently, the implications of a system failure were all too real.

"Every time we rebooted, we wondered what would happen if it didn't come back online," said Mark Conrad, Communications Supervisor for the Cornell University Police Department. With an operating system and hardware that were no longer vendor-supported, as well as missing code for the original software application, the team decided it was time for a new solution that would offer reliability, efficiency, and functionality the old system couldn't support. "We had fallback capabilities established, but the caller location information would be missing if the old system went down. We wanted to put a vendor on the hook for all of that," said Tom Ball, Manager of Voice Engineering for Cornell University.

THE SOLUTION

The team evaluated several options but kept running into the same problem: everyone wanted to use a CAMA trunk to connect their software to Cornell's PBX switch. "That's like driving up your driveway and back down," Ball said. "It's not the best way to do things. We wanted to connect the 9-1-1 software directly to the PBX. Not only is this more efficient because calls don't get tied up in transit, but it saves money because we don't have to pay for extra infrastructure to support the call volumes."

The Cornell team selected Spok's 9-1-1 call center system, Spok® pc/psap. This application connects directly to Cornell's PBX. "We needed a company that could work with us to configure their software to fit our environment," Ball said. "Additionally, Cornell has its own automatic location identification (ALI) database that needed to be incorporated, versus using the one maintained by the local telecom provider."

OVERVIEW

Founded in 1865 in Ithaca, N.Y., Cornell University has become a world-renowned institution with students and programs in many cities. On the Ithaca campus alone there are nearly 20,000 students representing every state and 120 countries. The Cornell University Police are dedicated to maintaining a safe and secure environment for this culturally diverse campus, a cornerstone of academic freedom. It is committed to providing the highest quality services for the community by embracing the core values of truth, respect, excellence, teamwork and integrity. The Cornell Police Communications Center is staffed by eight full-time telecommunications officers. The shifts run around the clock, ensuring that the Dispatch Office is always staffed, twenty-four hours a day, seven days a week.

INDUSTRY

Education

BUSINESS DRIVERS

- Implement the latest 9-1-1 call-handling technology to ensure ongoing reliability.
- Continue to provide all on campus with fast response to safety issues.
- Create a technology foundation that could support new safety features and compliance with key standards.

CASE STUDY

By presenting all critical information at the call-takers' workstations, the Spok system enables the police department to provide fast response to all callers, regardless of the type of inquiry. "As a campus police station, we have to be very customer service-oriented," Conrad said. "Not only does the center field calls for 9-1-1 emergencies, but we also handle inquiries about parking and even parents looking for their children. Parents from around the world are calling, worried they haven't heard from their son or daughter in a while. We help them get in touch."

One feature the team has found beneficial is the one-click call transfer directly from the screen. This means that non-emergency calls can be sent to another team member to free up operators for more urgent matters.

Other key features are the ability to better handle TDD calls for the hearing-impaired and the ability to respond to abandoned 9-1-1 calls. For abandoned calls – when the caller hangs up before speaking to an operator – Cornell police are able to determine the caller's exact location and dispatch an officer to ensure safety.

THE RESULTS

The Cornell Police Department is handling more than 4,000 calls a month using Spok pc/psap. They are now able to process all calls more efficiently. The software has helped Cornell meet standards for the Association of Public Safety Communications Officials (APCO) by having two staff members available 24/7. It also helps meet compliance guidelines for the National Emergency Number Association (NENA) regarding the way 9-1-1 calls are managed.

Recently, the department tested its system backup capabilities when an electrical trunk exploded right outside the building. "One of the goals with the new system was to ensure the backup center a few blocks away could have the same capabilities as the main station. [Spok] pc/psap fit right into this model," Conrad said. "During this situation we staffed the backup center as a precaution, and the system was up and running just as expected."



According to Ball, the spotlight on campus safety has become front and center. "After the Virginia Tech disaster all universities were immediately thrust into the middle of how to deal with that type of scenario. That intensified things and brought more focus to having a center that's up to date," he said. "The Police Department is the center of the university from a life safety standpoint. We have to be responsive, and [Spok] pc/psap is key to our efforts. It adds more flexibility in how we communicate."

SOLUTION

Spok® pc/psap

RESULTS

- Established a highly reliable, efficient system for responding to 9-1-1 calls.
- Improved ability to provide customer support for non-emergency callers.

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