ACCESS CONTROL & SECURITY SYSTEMS

Fifty-thousand students, staff and faculty at the University of California, Los Angeles, have the opportunity to receive notification of emergency situations by using the school's BruinAlert mass notification system.

UCLA Turns to Technology to Protect Students and Staff

UCLA DEPLOYS ATHOC'S NETWORK-CENTRIC EMERGENCY NOTIFICATION SYSTEM ON CAMPUS TO REACH ITS POPULATION OF 50,000 INDIVIDUALS

BY STEPHANIE SILK

With upwards of 50,000 students, staff and faculty under its purview, the administration at the University of California, Los Angeles (UCLA) takes mass emergency notification as seriously as it does any other security measure.

More than a year ago, the university realized that its system of communication through e-mail, an AM radio station, a TV station with a broadcast ticker, a toll-free number and a Web site was just not enough for the large population. Although fairly simple ways to communicate to students and staff, the disconnected systems required a proactive approach from the users.

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Jack Powazek, assistant vice chancellor of general services for UCLA, says that it is a well-known concept that campuses should have multiple ways to communicate. But, there are limitations with disconnected systems. "In the situation of an earthquake, which is something that UCLA may very well face, some systems may or may not be operational in that circumstance," Powazek says. "So you need a variety of communication in that situation. Plus, every person receives information in different ways. Students may use texting, while staff may use e-mail more."

UCLA needed interoperability to ensure the safety of its campus, and in early 2007, administration took charge.

The school put out a request for proposals early last year—before the shootings at Virginia Tech. Powazek says that several vendors proposed bids. "We wanted a system that we could use in a mass emergency situation, but also one for day-to-day events." AtHoc Inc., Burlingame, Calif., a provider of network-centric emergency notification systems, proposed its IWSAlerts system. The notification technology uses an IP network to turn various devices into an alarm system in times of emergency. A significant cost-saving benefit is that UCLA's IWSAlerts use the university's existing internal IP network, thus allowing the Web-based system to rapidly reach 50,000 individuals from a single console.

Through UCLA's IWSAlerts system, which is now dubbed "BruinAlert," up to 15,000 online users will be notified via desktop alerts (to computers and mobile devices), and up to 50,000 users will be notified via SMS text messages. The ability to reach anyone no matter his or her location eliminates boundary limits, according to Simon Berman, vice president of products for AtHoc. "Mass notification is no longer constrained to being in the building that has the alarm. It solves issues that limit legacy and physical security alarms, including scalability, which is the ability to reach large numbers quickly," Berman says.

BruinAlert provides outbound information to people on campus about emergency situations and how to respond. The desktop alert brings an intrusive pop-up window to the user's computer monitor, and it does not go away until the user acknowledges it.

Another form of BruinAlert, text messaging, is a quick way to disseminate short amounts of message. However, Berman says it also has its flaws. "It's not as rich as desktop messages because of the size limit," he says. (Text messages have a maximum capacity of 160 characters.) "It also does not have guaranteed delivery; the recipients are charged and it's hard to get a hold of every student's contact information."

Both ways of contact also include a feedback mechanism that allows students and faculty to respond in real-time, informing the school that they are safe or if there is other information they should know. "Our solution is not a one-way communication device," Berman says.

Even in a system as sophisticated as Bruin-Alert, there still has to be someone on the other end pushing a button. That's where the personnel with "alerting authority" come in. UCLA has developed a policy stating who makes the decision on what message goes out, when it goes out and to whom, based on the situation. Powazek says that the responsibility lies mostly on chancellors, and their authority is based on alert levels. Powazek says there are also about a dozen trained operators who work on a rotating basis to input the messages and trigger alerts from any network-connected PC with a Web browser.

Berman says such a system of rotating operators and unification that brings all delivery channels into a single, centralized system solves issues that many organizations struggle with. "It works so that in times of emergency, you don't need five operators running five systems giving five messages. It maximizes the chance to reach people with information they need."

The operators who input the messages can select from more than 100 pre-configured messages that vary by wording, color and instructions, but Berman says it is unrealistic that each message would be ready to send as is. "In many cases, as an emergency alert is triggered, the operators have to make minor changes. If there is a pre-configured scenario that says a shooter is on campus, rather than re-build the entire message to match the current details, the operator brings up that scenario, makes edits, modifies questions to ask the recipient and then creates that alert," Berman says. "That way they don't have to come up with terminology in times of duress."

The student portion of the BruinAlert system went live last November with e-mail and text components. All registered students with a UCLA e-mail address are automatically enrolled. However, sign-up for the text alert has been more of a challenge. "Getting the students to sign up for text messaging took a bit of time. However, through marketing in late 2007 and early 2008, we were able to reach a 32 percent sign-up rate," Powazek says.

While they are still working on raising that number, administration is also in the process of adding another device to their interoperable system. UCLA is currently integrating BruinAlert with their existing speaker systems located throughout the campus as well as with the university radio station.

AtHoc is integrating with three sirens to evacuation areas on campus to provide emergency notifications simultaneously through all channels. The sirens can be especially helpful during weather events, Powazek suggests. "We can communicate to thousands of students at one time once they are outside after an event."

Berman says that mass notification is one of the many important moving parts of school security, but that schools are still behind the curve. "This is in high demand. The educational market was uneducated on this, but as a result of the recent tragedies, there became a huge pressure on chancellors and even parents to stop these situations. But the fact of the matter is that they still occur," Berman says.

Powazek says that having the technology to get out timely information makes a difference in school safety, but an obstacle still remains. "Technology is outpacing human decision-making. And now, we have the ability, once you know what to say, to get a message out quickly to many people simultaneously," he says. "The challenge now is to get information that is credible and accurate. Once you send something out, it's like toothpaste in a tube—you can't get it back in." ■

ATHOC IWSALERTS EMERGENCY NOTIFICATION SYSTEM