Cerner Corporation Connects Security at Multiple Sites Using Raytheon's ACU-2000 IP and NXU-2A

ACU-2000 IP

Headquartered in Kansas City, Missouri, Cerner Corporation is a leading supplier of healthcare information technology solutions that optimize clinical and financial outcomes. Within the Kansas City metro area, Cerner has two large campus communities and four additional off-site locations.

Corporate security management, officers at each site, facility engineers and local emergency response providers all needed the ability to communicate on a

daily basis and during emergency response. Direct connect phones, corporate mobile phones, analog twoway radios and session initiation protocol (SIP) phones were used by these different entities - all of

which served a purpose but functioned independently.

Security officers at each site need to be able to communicate with the security operations center at headquarters and with each other. Clear, immediate radio communication was key to accomplishing effective, timely response.

Communication had been achieved by a non-integrated variety of solutions and through the use of a 900 MHz analog two way radio system, but needed vast improvement.

"The 900 MHz system was approximately three years old and originally only supported radio communication for the shuttle service on campus," said Doug Heaton, the operations leader for Cerner's corporate security.

Using this system, many areas had no communications coverage or the quality of transmissions was severely diminished.

"Radio communication at headquarters could be described as marginal at best," added Heaton.

Building material construction, topography, portable radio transmission power, the location of the tower site and analog technology were some of the factors that hindered communications for Cerner's corporate security.

"We have had several instances of marginal communi-

cation and even a period in which the current radio system tower was compromised and literally shut down our radio transmittal capability," he added.

A newly added campus also left Cerner Coporation with virtually no

radio communications between the security operations center and the officers at the new campus.

Cerner's corporate security realized highly reliable radio communication was vital in providing physical security to all Cerner associates, clients and guests. And, that timely response to any given situation could mean the difference between the loss of life, serious injury and substantial property loss.

Cerner's corporate security worked to identify a communications solution that would link the metro area's campuses and sites together through one reliable communications system. Their primary objective was to improve the clarity and reliability of radio communications while moving away from the limited expandability of an analog system to a digital system.

Cerner's corporate security also looked for a radio system that could be expanded to additional regional and global sites added in the future.

Commenco, Inc., the same company which designed, installed and maintained Cerner's previous 900 MHz radio system, was again contacted to suggest a solution that would meet Cerner's new requirements.

Raytheon's ACU-2000 IP and NXU-2a units were recommended by Commenco and after evaluation, were purchased by Cerner.

"We have identical configurations at each of the four sites in the Kansas City metro area. The sites are linked through Cerner's custom network back to our security operations data center and then integrated through the ACU-2000 IP gateway," said Heaton.

Each site has one Motorola repeater and control station as well as one NXU-2a unit. The security operations center has two Motorola control stations with compatible handset and headsets. The vehicle patrols use Motorola mobile units while the site officers operate on Motorola portable radios.

Cerner also uses additional modules on the ACU-2000 IP gateway to integrate their SIP telephone system with

their radio system.

"Using the new system, the ability to communicate on a daily basis with all officers at all locations and at headquarters has been highly successful," said Heaton. "I am confident that, should a large-scale scenario develop, our communications solution will perform with optimum success."

The ACU-2000 IP and NXU-2a units from Raytheon have allowed for clear and uninterrupted communication among all Cerner sites in the Kansas City metro area. The new system also gives Cerner the ability to expand the system as needed.

In the future, Cerner plans to look into enabling interoperability with the local North Kansas City police and fire departments. They also may consider bringing their global sites onto their two-way radio system through control center integration.

About Cerner:

Cerner is taking the paper chart out of healthcare, eliminating error, variance and waste in the care process. With more than 6,000 clients worldwide, Cerner is the leading supplier of healthcare information technology. NASDAQ: CERN. For more information, please visit http://www.cerner.com.

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