Command Vehicle Delivers Real-time Data for Sheriff's Office

Monmouth County Sheriff's Office relies on mobile command center to help ensure situational awareness for field officers.

EXECUTIVE SUMMARY

MONMOUTH COUNTY SHERIFF'S OFFICE

- State and Local Government
- Freehold, New Jersey
- 642 field officers and employees

BUSINESS CHALLENGE

- Need to communicate with and provide real-time information, such as video, to field staff
- Desire to have mobile access to Internet in police and emergency response vehicles

NETWORK SOLUTION

- Updated network foundation to support new services for mobile command centers
- Installed additional security measures
- Built mobile police station, using firewalls and core routers and switches

BUSINESS RESULTS

- Increased information sharing and productivity of Communications Division
- Improved utilization of wireless applications by field officers and staff

Business Challenge

The Monmouth County Sheriff's Office is a public safety entity that serves the 650,000 plus residents of Monmouth County, New Jersey. It was the first U.S. law enforcement agency to be nationally accredited by the Commission on Accreditation for Law Enforcement Agencies in all five areas of operation: the law enforcement division, correctional facility, correctional healthcare, 9-1-1 emergency dispatch center, and youth detention center. The Monmouth County Sheriff's Office is also one of the first law enforcement agencies in New Jersey to create a county hub WAN for access to Criminal Justice Information System and National Crime Information Computing (CJIS/NCIC) systems instead of utilizing point-to-point connections from each department directly to the New Jersey State Police (NJSP).

The Monmouth County Sheriff's Office field communications vehicle was a state-of-the-art vehicle with yesterday's technology. It contained two standalone PCs with individual Verizon wireless cards to access the public safety network, which took additional steps to access critical applications. The vehicle also had an analog phone using a Telco modem to make incoming and outgoing phone calls. This setup did not allow for true networking and expandability, and thus did not allow communications staff to share resources when the communications vehicle was deployed.

When public safety officials wanted to access computer-aided dispatch or query local, state, or national databases as well as the Internet, they had to provide multiple logins to get online. This tedious, error-prone process took time away from the law enforcement personnel's first duty, protecting citizens. "Our officers in the field need access to case files, mug shots, and video online," says Sheriff Shaun Golden of the Monmouth County Sheriff's Office. "To ensure the safety of our officers on duty, we needed to provide them with this information in real time to enhance situational awareness, which was not possible with our old network."

Network Solution

Monmouth County Sheriff's Office implemented a Cisco wireless network in its field communications vehicle with voice and data capabilities that support the Sheriff's

department and local police stations during emergency response situations. The new network allows for communications staff and officers to share information and collaborate better in real time. The importance of this is to provide for better officer and public safety.

To provide remote, mobile means of communications wherever needed and provide officers with immediate access to critical data, IT officials opted to set up a LAN with Cisco Unified CallManager, which also provides access to the county's public safety WAN utilizing a secure VPN tunnel. When the vehicle is started, it is automatically connected to the VPN and available for use. Communications staff can log on to the computers with a single password and access the Sheriff's Office's dispatch system as if they were at headquarters. They can track small and large-scale incidents and query local, state, and national systems.

This network also allows emergency personnel to connect to the wireless access point to use Internet or other tools for strategic operations in an event. The unit carries four Cisco IP phones, which allow multiple people on a call and have the ability to conference another party, and two cordless Cisco IP phones, which can be used while outside the vehicle. The vehicle also has printing and fax capability. The camera/digital video recorder on the vehicle is networked, and video can be monitored from headquarters to assess the situation and help ensure safety. The PCs can also access the Sheriff's Office's cable network through Slingbox, a TV streaming device that enables users to remotely view their home's cable, satellite, or personal video recorder, which allows workers in the command center to monitor important broadcast news channels.

"Essentially we created a police station on wheels," says Paul Doty, senior data programmer for Monmouth County Sheriff's Office. "Everything is networked; we have fax capabilities, the ability to receive multiple calls, and wireless communications. It gives officers flexibility and allows operators to perform to the best of their ability on the scene."

As the Sheriff's Office increases the amount of information sent, it is important that the network is as secure as possible. By installing Cisco ASA 5500 Series Adaptive Security Appliances with firewalls, the station now feels comfortable sending confidential information to vehicles in the field.

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Business Results

Now that Monmouth County Sheriff's Office uses a VPN to connect to the Internet over the cloud, information can be sent to the field in real time, reducing the strain on 911 operators. All vehicles are equipped with 3G technology that is routed through the countywide hub smoothly.

The Cisco solution increased efficiency for users with single logins. Officers save time and benefit from a transparent transition from sitting at a desk to logging into the field communications.

PRODUCT LIST
Routing and Switching
• Cisco 2800 Series Integrated Services Router
• Cisco Catalyst® 3560 Series
Security and VPN
• Cisco ASA 5500 Series Adaptive Security Appliance
Voice and IP Communications
• Cisco Unified Communications Manager 7.1
• Cisco Unity® Connection 7.1

"We recently hosted the Shore Marathon" says Sheriff Golden. "There were over 230 emergency medical service (EMS) calls activated for the EMS task force throughout the event. Our new network allowed us to process those calls in a timely manner and view real-time video for situational awareness of the event."

"We built a mobile command center that can be deployed to large-scale events," says Charles Mead, director of data processing. "Our police and homeland security officers are able to view information and surveillance of large scale incidents immediately, increasing situational awareness at all times. For example, these command centers help officers sent to DWI [Driving While Intoxicated] stops. There is a lot of processing during those incidents and our Cisco solution streamlines the process."

Monmouth County Sheriff's Office is also leveraging the network to broadcast feeds from video surveillance cameras installed in the mobile command center. Through new video capabilities and Slingbox, the Sheriff's Office is hoping to assist local and national news coverage in the event of an emergency.

The new routers increased network speeds, which the Sheriff's office plans to increase further in two years. Staff is beginning to send video and voice mug shots over the WAN, something they could not do without the additional bandwidth and increased reliability. The security of the network has also improved.

"In the past we used to have run out and fix things, and now we can fix things remotely," says Mead. "The speed of the lines and being able to be remotely connected to all of our other police departments is a huge help. Paul Doty pushes out Windows updates, easily installed in all police stations. Those updates can tie up bandwidth, so having the ability to schedule that at night is helpful. We are accomplishing a lot more at our desk."

For More Information

To find out more about the Cisco core, go to: http://www.cisco.com/go/core

To find out more about the Cisco core, go to: http://www.cisco.com/go/security

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