Allen County Sheriff's Office
Case Study – Public Safety

COLUMBITECH

SUMMARY

Allen County Sheriff's Office in northwest Ohio has replaced its legacy IPSec VPN from Cisco with Columbitech Mobile VPN to provide first responders with persistent secure access to mission-critical information, while significantly reducing cost.

The mobile VPN software from Columbitech has been implemented to secure computer equipment used in the police, fire, and ambulance vehicles, enabling fast and secure communication between the office and the workers in the field.

THE CHALLENGE

- Lost connections
- No support for session persistence or network roaming
- Slow application performance over the wireless network
- High support costs and maintenance fees

The Allen County Sheriff's Office was using an IPSec-based VPN solution from Cisco to secure Motorola rugged notebooks ML-900 and ML-905 with Verizon Aircards, which were used by first responders and belonged to any of the 27 agencies that shared the same network. The solution lacked support for network roaming and session persistence, which had a negative impact on productivity and system availability.

As more users joined the network, applications became slower and data were sometimes lost. Since the VPN did not support network roaming and session persistence, the VPN session was terminated every time the computer roamed between the Wi-Fi network used in the office and the cellular

network used in the field. The VPN session also timed out every time the user moved out of coverage.

When a connection was lost, the system deemed it a security violation, and first responders who tried to reengage the network via the VPN were denied access for up to two hours. During this delay, they did not have access to any of the mission-critical applications on the network and the department's dispatch unit could not track emergency personnel to see who was closest in case of an emergency. The connectivity problem seriously delayed the response time and hindered situational awareness, with negative impact on citizens' safety.

Besides the connectivity issues, the IPSec VPN was expensive to support and the yearly maintenance fee was too high.

THE EVALUATION CRITERIA

- Seamless roaming
- Support for session persistence/session resume
- FIPS 140-2 with strong encryption
- Purchase price and maintenance cost

Session persistence and support for seamless roaming were important decision criteria as Allen County Sheriff's Office was looking to upgrade its VPN solution. They required strong encryption and a solution that was FIPS 140-2 certified by the U.S. government to ensure that it met high security standards. Additionally, the sheriff's office needed to reduce cost to save taxpayers money and readjust to a shrinking IT budget. Price and maintenance costs were therefore key decision points as well.

THE SOLUTION

Allen County selected Columbitech Mobile VPN after careful research and evaluation of several different VPN solutions. The Columbitech Mobile VPN met all the decision criteria, including support for session persistence and seamless roaming, and the solution was FIPS 140-2 certified, offering strong encryption and authentication as required. Furthermore, the Columbitech solution was the most cost-effective to purchase and support.

"The Columbitech Mobile VPN exceeded our detailed evaluation criteria and was by far the most reliable, cost-efficient

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Columbitech Mobile VPN is optimized for protecting laptops or mobile devices with limited battery time, storage, and processing power. It allows the mobile device to hibernate to save battery power without losing the VPN session. Advanced data compression provides up to 100 percent better throughput compared to IPSec-based VPNs, which ensures better application performance and reduced data fees.

solution that we evaluated. Columbitech's solution provided more functionality for less than half of the cost when compared to other VPN solutions," said Isaac Dunifon, deputy of the Allen County Communication Technology Department.

Unlike the legacy VPNs that were used prior to the system and did not perform well in wireless environments, Columbitech Mobile VPN is a third-generation VPN based on the Transport Layer Protocol (TLS), a security protocol that has been optimized for wireless connections with limited and sometimes unstable connections. The mobile VPN ensures continuous access to mission-critical applications such as dispatch of emergency calls, fire inspection data, police reports, and vehicle and identity checkups as users roam between the Wi-Fi network in the office and different wide area wireless networks as well as travel in and out of coverage. It allows users to stay securely connected with complete network transparency.

"Using Columbitech's solution, we have increased emergency personnel productivity. Columbitech's strong security solution keeps our data safe while also helping the sheriff's office to protect our citizens and first responders with secure mission-critical information. With the help of Columbitech, I believe our ability of providing fast, secure, reliable information to the police, fire, and EMS departments is now at a much higher standard, states Isaac Dunifon."

For the 911 dispatchers, the most important element of the new software is the dramatically improved connectivity that enables them to track emergency personnel in real time so that they can quickly identify which response team is closest in case of an emergency.

"For us, the important thing is it allows dispatchers to view the locations of all units in real time via GPS. When a call comes in, we know which unit is the closest and can respond more quickly with more information at hand," said Isaac Dunifon.

Additionally, Columbitech Mobile VPN gives the sheriff's office increased visibility and control over all devices accessing the network. It allows them to enforce IT policies and assign and terminate individual access privileges to associates based on every person's responsibilities and needs, instead of setting policies that are tied to the device. If a laptop is stolen or an employee changes positions, the IT administrator can quickly terminate or change the access rights.

FAST IMPLEMENTATION

The Columbitech Mobile VPN is software-based and consists of a client and server software. Allen County installed the server software on an existing Windows 2003 server, and the client software was deployed by using USB. The deployment took only a few hours to complete. Future software updates can be handled using Columbitech's tool for remote update over the wireless network.

ROI

- Shortened response time for first responders
- Increased situational awareness
- Improved productivity
- Better application performance and speed
- No lost transactions
- Significantly lower monthly cost

For more information, visit our web site, www.columbitech.com.