Radio IP
Redefining Secure Mobility

Radio IP Facilitates Consolidation of Multi-Agency Communication Center through Secure, Mobile Connectivity Solution

The Village of Bayside is situated in the northeast corner of Milwaukee County and offers a full complement of public services. In order to control budgets and improve public services, seven (7) municipalities across the county undertook an aggressive project to consolidated communication services for multiple police, fire and EMS departments into one center located in Bayside.

OBJECTIVE

Spearheaded by the IT Department of the Bayside Police Department, the project mandated that mobile data communications be enhanced to properly equip front line police officers, firefighters and other first responders with an appropriate software suite designed to ensure they accomplish their jobs efficiently and safely, all while reducing operational costs.

"Our key objective was to improve the connectivity of our officers and firefighters in the field while ensuring the security of the transmissions,"

Bruce Resnick
Chief of Police
Bayside Police Department

CHALLENGES

Frontline police and fire vehicles were already equipped with access to a private mobile radio (PMR) network, but the limited bandwidth capabilities of the network prevented the officers from leveraging new applications, including 911 dispatch, messaging, mobile photo/video verification, automatic license plate readers, biometric readers, in-car video, queries to local, State and Federal databases, as well as hazmat and pre-plan inquiries for frontline fire fighters. -- all of which are rapidly becoming integral to day-to-day operations, yet require larger bandwidth and faster transmission speeds to function efficiently.

"These new applications are not a luxury; they are as much of a necessity as a well maintained vehicle in enabling our first responders in their day-to-day operations," said Chief Resnick. "What's more, the application can't be a distraction – it has to just be available whenever and wherever it's needed, without requiring officers to fiddle around with network connection or security settings. We also wanted all this functionality provided by a single software-based solution from a reputable vendor."

SOLUTION

The Bayside Police Department and their public safety partners implemented a fleet-wide Mult-IP mobile VPN solution to provide fast, secure, and persistent wireless connectivity across multiple networks, including public 3G/4G and Wi-Fi. The radio modem in every frontline police, fire and EMS vehicle was replaced with a next-generation cellular modem that transmits/receives data directly to/from the new consolidated dispatch center. Officers and firefighters can now leverage a broad portfolio of applications to efficiently manage operations in day-to-day or emergency situations.

Radio IP
Redefining Secure Mobility

ALWAYS ON. ALWAYS CONNECTED. ALWAYS SECURE.

"Our officers and firefighters run multiple applications simultaneously and are constantly moving in and out of wireless coverage areas," **explained Scott Grahn, IT Manager at the Bayside Police Department.** *"Mult-IP's concurrent networking allows us to leverage any and all available network assets simultaneously. We can configure client device profiles that define primary, secondary and tertiary networks per application, ensuring seamless failover to backup network routes in the case of dead zones or hand-offs, providing our officers with seamless, transparent roaming."*

EXPAND NETWORK COVERAGE

The industry's only network-agnostic mobile VPN solution, Mult-IP leverages the power and availability of multiple networks simultaneously – including cellular 3G/4G, LTE, Wi-Fi, private radio and satellite – to deliver transparent, uninterrupted and secure communications. Developed using Radio IP's patented concurrent networks technology, Mult-IP enables management of multiple, independent networks simultaneously within one mobile VPN, assuring uninterrupted connectivity for various mobile workforces regardless of their location while exceeding data protection regulations.

IMPROVE PRODUCTIVITY & EFFICIENCY

The Mult-IP application persistence feature ensures the automatic and transparent reconnection of applications following a loss in network connectivity. Officers no longer need to re-launch an application or re-enter their log-in credentials -- Mult-IP takes care of re-establishing the application to its previous state without any intervention from the officer.

"Before implementing Mult-IP, officers were frequently dealing with applications disconnecting due to lost network connections when entering underground parking structures, or when traveling through cellular dead zones," explained Grahn.

"Officers and firefighters were forced to manually re-initiate the applications, distracting them from their main duties. Mult-IP's application persistence has drastically reduced not only our users' frustration, but has also resulted in a 50% drop in calls to our help desk as the system reconnects the applications seamlessly."

ENFORCE SECURITY POLICIES

Mult-IP delivers seamless and persistent device and user security even when roaming over disparate networks. Enforcing and exceeding FBI CJIS and HIPAA security policies, Radio IP's MVPN solutions support the highest encryption and authentication standards while remaining flexible enough to allow agencies to adjust their security programs according to their needs, budgets and resources.

Radio IP
Redefining Secure Mobility

MANAGING MOBILE OPERATIONS

MULTIPLE AGENCIES, MULTIPLE ADMINISTRATORS, ONE MOBILE VPN

Radio IP supports the diverse and unique administration requirements of multiple agencies within one system through the use of functional groups. A functional group is a collection of client devices. Administrators can be assigned to one or more functional groups, controlling access to their associated data via permission-based access rights. This intelligent partitioning of resources empowers each agency to configure unique policies based on priority, operational parameters, and/or authentication requirements — independent of other groups within a single agency and across other agencies.

"Providing our frontline officers and firefighters with enhanced, secure mobile communications was the first step," explained Grahn. "But, in a consolidated, multi-agency environment, it is just as critical that the solution allow us to easily manage and monitor the varying network and security requirements of each agency in real-time."

COST-EFFECTIVE, EFFICIENT, UNOBTRUSIVE SOFTWARE UPDATES…

"Putting our field devices out of commission for any amount of time to accommodate a software update is unacceptable," said Grahn. "And, when dealing with a multi-agency environment, scheduling a manual fleet-wide update is unrealistic. We needed a solution that would give us the flexibility to update client devices efficiently without any user invention."

- Minimize downtime - mobile client devices are upgraded wirelessly in the field
- Eliminate user involvement in the update process
- Accelerate and streamline process through targeted group upgrades
- Manage network resources with throttling capabilities
- Control costs through network-aware downloads
- Accommodate roaming and prevent loss of data

Leveraging the intuitive Mult-IP management console, administrators can send software updates to client devices without requiring any physical handling of the client devices or user intervention. Additionally, the administrators can select which functional group of client devices to upgrade, and on which networks to transfer the remote updates. Mult-IP also supports a throttling mechanism to control the number of simultaneous downloads.

MOVING FORWARD

The on-going innovation in devices is empowering users to remain productive regardless of where they are. Workforces must be able to conduct business from virtually any location at any hour of the day or night.

Technology will continue to evolve whether for dispatch applications, in-vehicle devices, networks or GPS-based handhelds. In addition, with the introduction of Homeland Security requirements, satisfying state and federal public safety technology standards is mandatory. With change being inevitable as technology advances, the interoperability introduced by Radio IP's Mult-IP Mobile VPN solution protects investments and ensures seamless and painless migration to new technologies. The result eliminates downtime and reduces the risk of new technology integration.

"Radio IP was vital in allowing us to achieve our objectives," said Chief Resnick. "Not only did the Mult-IP solution provide us a true public safety feature set, but the Radio IP customer support team went above and beyond to understand our specific operational challenges. They worked with us whenever needed to achieve a seamless deployment that fit our schedule and objectives."

MOBILIZE YOUR PRODUCTIVITY

Visit www.radioip.com or contact sales@radio-ip.com to learn how Radio IP's mobile VPN solutions can empower your mobile workforce.

MOBILIZE YOUR PRODUCTIVITY