

CHALLENGES

- Accessing information from the National Crime Information Center was taking too long to process.
- Software developed to increase productivity became useless during poor or congested network connections.
- Network outages were causing information to get lost, resulting in decreased productivity and an inefficient use of bandwidth.

SOLUTION

Circadence MVO[™] 1200
WAN Optimization Suite

BENEFIT SUMMARY

- Poor throughput and latency issues are resolved through Circadence's patented optimization protocol.
- Link Resilience[™] prevents multiple GPS activations and the loss of applications.

CIRCADENCE MVO[™] PRODUCED A 5X PERFORMANCE IMPROVEMENT IN THROUGHPUT FOR THE RIDGELAND POLICE DEPARTMENT

Profile

The **Ridgeland Police Department** in Ridgeland, Mississippi, currently has 50 cars in their patrol unit, all equipped with remote access to critical applications for completing incident reports, accessing computer-aided dispatch systems, connecting to the National Crime Information Center (NCIC), and more. Officers utilize these resources while traveling to the many remote locations that their jobs take them, relying on their WAN to send and receive these applications through their 3G network.

Challenges

The Ridgeland Police Department relies on fast network connections to receive important information from the NCIC. This information is critical to officers in the field as it provides pertinent data on suspects, such as criminal history, current warrants, stolen vehicle reports and more, using Social Security numbers, drivers' license numbers, and license plate numbers. If the network is slow, due to bad reception or congestion, this information can take a long time to receive – resulting in frustration and unnecessary stress for the officers, and in some cases, putting them in potentially dangerous situations. One officer reported that he had to let a traffic stop go because the query did not come through in a timely matter. Later, once the query finally arrived, he discovered he released someone with an outstanding arrest warrant.

During poor or congested network connections, other vital applications suffer as well. For example, an application that was developed to submit incident reports directly from the field and help make officers more productive has quickly become useless as a result of long processing times. To make things worse, if an officer is in the middle of processing a report and a network outage occurs, all of the information is lost, causing the officer to have to completely close the mobile application, restart it, re-authenticate it, and then resend the application from the beginning. As a result, several of the police officers have abandoned these remote resources, finding it easier and more efficient to drive back to the police station to complete their paperwork, rather than waste valuable time attempting to utilize their remote software unsuccessfully.

Mobile laptops in their police cars come equipped with GPS activation, allowing officers to pinpoint the exact location of their cars to determine where they are in relation to their desired destinations. If an outage occurs, the system accesses another GPS link, rather than reconnecting to the link opened before the outage. This process results in some officers having multiple GPS activations open at the same time when only one is necessary. Ultimately, these duplicate GPS activations create an inefficient use of bandwidth that would be better allocated to other mission-critical applications.

Circadence® Solutions

The Circadence MVO™ 1200 WAN Optimization suite provided the necessary solution to these issues facing the Ridgeland Police Department.

When Circadence MVO technology was implemented into their network, increased network performance was realized immediately. The time to process requests from the NCIC was reduced significantly, providing the increase in productivity that they were originally expecting. This was accomplished through the use of Circadence's unique patented optimization protocol, which is designed to substantially reduce latency and congestion, and thereby increase network throughput significantly. With Circadence MVO, they improved bandwidth utilization by five times what they were previously experiencing. Their police officers no longer run into the predicament of whether or not to let a possible suspect go due to poor response time from the NCIC.

In addition, Circadence MVO dramatically improved their ability to process incident reports from the field. Officers are now able to utilize the software remotely as intended, rather than returning to the central station to complete their paperwork. This improvement has resulted in much more accurate and efficient reporting directly from their squad cars, permitting them to spend more time on the streets, which in turn enhances public safety.

Network outages, which previously caused unnecessary frustration and stress for officers, no longer have the same effect, resulting in a further increase in their productivity. This was accomplished through the use of Link Resilience™, which prevents officers from having to resend information that is in mid-stream during a network interruption. Now, when an outage occurs, the information is held in place until the network restores. When the network connection is reestablished, the information continues to transmit from where it left off, preventing loss and the need for officers to resend information.

As an added benefit, Link Resilience created a much more efficient use of their bandwidth, eliminating the need to activate multiple GPS links during network interruptions. When a network interruption is experienced, an active GPS link is now held in place, resulting in that same active link opening as soon as the network is restored, creating a much more effective working environment.

“The use of Circadence software has made us much more productive, with faster responses from NCIC and working reports from the field. We are light years ahead of where we were before the Circadence implementation.”

– Officer Justin Lancaster, Ridgeland Police Department, Ridgeland, MS

For More Information

For more information about the Circadence MVO 1200 WAN Optimization suite, please visit www.circadence.com/products/MVO1200.