Industry
Public safety

Location
Surrey, British Columbia

Focus
Resource management

Fleet dispatching

Solution
- CTM-ONE, CTM-200 device
- Cypress VUE
- Cypress IOT

Category
Fleet management

Surrey Fire Service boosts fleet monitoring with full IoT cloud solution

The Surrey Fire Service (SFS) provides a high level of life and property safety through Public Education, Prevention Services, Fire Control, Emergency Medical Services and Environmental Preservation. In pursuit of greater situational awareness, SFS implemented a comprehensive solution by integrating CTM-ONE wireless gateways with Cypress VUE telematics and Cypress IOT device management platform. SFS now enjoys enhanced situational awareness across its fleet, thereby allowing the team to effectively manage deployment of resources.

The challenge: lack of visibility for firetrucks' real-time location

In 2018, Surrey Fire Service initiated a partnership with Cypress Solutions with the primary aim of enhancing cellular connectivity for their onboard laptops. Initially relying on the CTM-200 wireless gateway to ensure stable internet connections, SFS later upgraded to the CTM-ONE device that supports the latest in LTE cellular technology and new features, such as dual SIM failover.

SFS's goal was to integrate GPS data into an active incident viewer application developed by the City of Surrey. However, the application resulted in challenges with data conversion and obtaining situational awareness of exact vehicle locations.

Despite efforts to utilize GPS data transmitted from the CTM devices and integrate it into various applications within the SFS environment, this solution required regular maintenance.

Jason Cairney, SFS Deputy Chief of Fire Prevention & Information Technology Services, explains, "During busy events such as windstorms, when all our firetrucks are deployed on incidents, they can become dispersed from their home station areas. During these events, pinpointing their exact locations becomes crucial for us to be able to deploy them to the next closest incident.

The solution: adopting a cloud platform for real-time fleet tracking

SFS have consistently experienced exceptional performance with the CTM hardware. Deputy Chief Cairney remarked, "With our existing CTM devices, discovering Cypress VUE through an email newsletter sparked my interest immediately. Learning that it's a ready-made solution and allows easy integration of our CTM devices to transmit data into the platform, the decision to adopt the solution was made."

For key users in SFS's operations team, Cypress VUE serves as more than just a static display board; it's a dynamic hub of real-time insights. Every day, the Operational Chiefs use the platform to monitor firetruck locations at incidents. With Cypress VUE, it's not just about knowing where they are, it's about empowering chief officers to make informed decisions that ensure accurate deployment across the community during critical fire incidents and weather events.

Monitoring device status with Cypress IOT

In addition to Cypress VUE, SFS Computer Support Specialists also use Cypress IOT, a device management and monitoring platform. Here are the benefits:

• Stay in the loop on device activity and operational status.
• Easily update configurations and firmware to devices.
• Tweak configurations straight from their desktop, tablet, or even smartphone.
• Quickly send commands to the devices they need, no matter where they are.
• Visualize data relating to device's operational status, including cellular performance and GPS/GNSS performance.

The Result: improved situational awareness and critical response time

Deputy Chief Cairney emphasized that this comprehensive solution has had a positive impact on situational awareness and resource deployment for the Surrey Fire Service. He explains, "The solution improved our ability to manage busy periods effectively. During peak times, we adjust our coverage and reduce response times by placing trucks closer to potential incidents. While our systems handle day-to-day operations smoothly, Cypress VUE becomes indispensable during high activity periods.

Additionally, our mechanics also benefit, as they can determine a vehicle location

when it's needed for repairs or spare truck availability."

What's next

Currently, SFS has 38 active CTM devices in firetrucks, with plans for further expansion across its front-line fleet. The team also intends to consider the use of the dual SIM failover functionality of the CTM-ONE to ensure uninterrupted connectivity.

"We're actively working on integrating more modems into our firetrucks and continue to discover more available features of Cypress VUE and Cypress IOT. Cypress Solutions provides excellent responsiveness and outstanding customer support, while being a local company adds an extra layer of convenience. The fact that the pre-built solutions are readily available saves us time and resources that would otherwise be spent on product development" shared Deputy Chief Cairney.

Find out how Cypress Solutions can help your business operations.

Visit **www.cypress.bc.ca** or email **info@cypress.bc.ca**

For more information, please visit /www.surrey.ca/about-surrey/surrey-fire-service