RTO
RealTime Ops

INTELLIGENT TRAFFIC MANAGEMENT WITH RED LION

Remote Management of Traffic Lights

State Department of Transportation officials face many operational challenges, especially as city populations continue to rise and traffic patterns become more complex. Accordingly, they must plan out ways to effectively increase the capacity and capabilities of their traffic management systems. Historically, these systems have not utilized solutions that deliver real-time communications, with many traffic controller units being preprogrammed on-site to operate autonomously. One traffic device OEM reached out to RTO to change that.

Case Overview | SMARTER TRAFFIC CONTROLS

An OEM that manufactures traffic control devices and hardened housings reached out to RTO to help them fulfill the requirements of a project they were working on for one of their large Department of Transportation clients. Their client was using outdated traffic controllers of the preprogrammed and autonomous variety. Such devices required a manual update every time their client needed to change traffic patterns. They had to deliver a smart LTE solution that would significantly reduce the number of truck rolls associated with these updates. RTO was up to the task, and laid out cellular solutions to add the intelligence their systems needed.

Challenges Faced

Cost of Truck Rolls

Sending out a team every time a set of traffic light patterns are in need of an adjustment is expensive.

From the costs associated with fleet vehicle maintenance, to the cost of the human resources involved and the potential risks associated with the deployment of those resources to high traffic areas.

Remote Management

The cost of truck rolls and risks of performing them are a direct result of systems that require on-site and in person updates.

They needed a wireless solution that would enable over-the-air updates and configuration to their controllers while using specific in-house traffic management software.

Rugged Solutions

The Northeast of the United States, is known for its rough climate with temperature extremes.

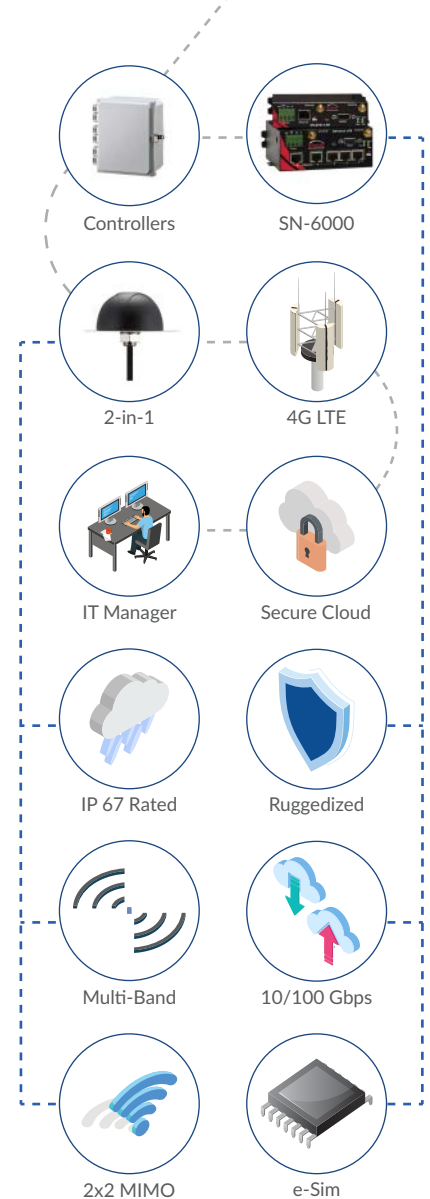In the winter there's snow, in spring there's torrential rain, and in summer there's soaring heat waves.

The solutions the DOT deploys must be able to handle harsh conditions.

Rapid Deployments

The DOT needs a solution that can be deployed quickly and easily.

Both to minimize deployment costs and the downtime of systems at vital intersections.

The components they utilize need to be preconfigured to operate within their existing network infrastructure.

Controllers

SN-6000

2-in-1

4G LTE

IT Manager

Secure Cloud

IP 67 Rated

Ruggedized

Multi-Band

10/100 Gbps

2x2 MIMO

e-Sim

RTO can deliver traffic equipment manufacturers the end-to-end communications solutions they need to support their clients' intelligent traffic management systems.

Red Lion Ruggedized Routers and Antennas

We helped the OEM outfit client traffic controller apparatus with industrial SN-6000 cellular routers and 2-in-1 cellular antennas from Red Lion. These rugged communications devices, enabled 4G LTE connectivity from DOT headquarters to the devices and software used to program the cities traffic lights.

With each router activated on the Verizon carrier network and provisioned to operate within the existing network infrastructure, this solution enabled the DOT to remotely control light patterns at intersections citywide, without the need to deploy truck rolls.

Hardened against varying weather, temperature, and humidity extremes, RTO delivered a solution that was engineered to last.

Shipped Ready and Delivered "Hot"

The DOT employed the experts at RTO to pre-configure all the devices prior to shipment. RealTime Ops worked with Red Lion, building templates to met the DOT's exacting needs and worked with Verizon to get every device activated on their network.

Because of this, every device arrived ready for immediate installation within their controller housings, ready to be plugged in and powered on. After install, each router and antenna pair enabled nearly instant connectivity to Verizon's private network.

Their department saw an almost overnight improvement to their traffic light management systems. With 4G LTE, they gained the ability to manage their systems remotely and in real-time.

Why Choose RTO?

For 15+ years RTO has provided IoT connectivity solutions to organizations that manufacture solutions for highway and traffic management agencies. We help OEM's engineer and provide solutions to clients by delivering only top-tier cellular equipment from the most trusted manufacturers worldwide.

Our DevProv+ services team configures, provisions, kits and ships your devices hot and ready for immediate use. And our installation teams ensure your devices are functioning securely, reliably, and at peak performance.

Reach out to RTO today to rapidly deploy cellular solutions that meet your clients' exacting traffic management needs.

CONTACT RTO TO ENGINEER YOUR CONNECTIVITY SOLUTION TODAY

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