



# Success Story

National Service Company Integrates Key Security Devices to Next Generation Networks Using Sangoma Vega 60G Gateway

## THE CUSTOMER

The customer is a nationally known provider for thousands of storefronts in the U.S. In addition, the company has a network of distribution centers to support these storefronts. The storefronts often have gates, alarm panels, call boxes, and other essential devices. Fire or alarm panels need to connect to centralized monitoring systems. Its distribution centers have an even wider assortment of devices, along with elevators in multi-story buildings.

Meeting industry/local safety standards is critical. Many safety devices relied upon analog telephone lines telecom providers are phasing out. Maintaining these safety and facilities devices is a necessary cost of doing business. The company wanted to deploy migration approaches that would be both cost-effective and flexible, avoiding "forklift" replacement of analog devices.



## CHALLENGES

This US company has thousands of storefronts and multiple distribution centers to provide service to customers that rely upon safety devices connected to monitoring systems using traditional analog telephone lines (also known as Plain Old Telephone Service or POTS). Major telecom providers are now phasing out these analog phone lines, so the company needed a cost-effective solution to support these safety functions while integrating their control systems via modern Internet Protocols and Mobile Networks.



## SOLUTIONS

Integration partner 10T Solutions was looking for a telecom equipment provider that could provide reliable connections between analog devices and IP networks that use the Session Initiation Protocol (SIP). By integrating 10T Solutions' mobile and IP routing technology with the Sangoma Vega 60G gateways, the customer can still use their existing safety devices to connect to current monitoring systems while routing these data sessions over either IP or standard 4G/5G mobile networks.

## BUSINESS CHALLENGES

---

The customer contacted 10T Solutions, a Sangoma partner, which has substantial experience as an integrator in developing customized solutions using technologies used in the Internet of Things (IoT) and Telecommunications. Working with the customer, 10T identified the need to continue support for various safety devices such as gates, alarms, doors, and elevators that are historically connected to analog phone lines to be managed by a variety of control systems. In addition, the customer works with telecom service providers throughout North America who are in the process of replacing analog telephone lines with newer technologies that run over IP and mobile. Therefore, the customer needs to support their safety solutions using either their current devices or investing in replacement devices that tie directly into the newer network technologies. The challenges are compounded by the fact that the centralized monitoring systems often use dialup data technologies to provide critical services, such as confirming the safety devices are active and responding to alarms.

To meet these challenges, 10T Solutions needed a telecommunications equipment partner with expertise in connecting to analog telephone devices and could also integrate to the SIP Trunking technology that is now being widely deployed in the United States. Since the applications involved data connections, 10T solutions needed a company with deep experience in utilizing data modem technologies over legacy and SIP networks.

## THE SOLUTION FROM SANGOMA

---

10T Solutions developed a customized solution for the customer, which used the Sangoma Vega 60G Gateway in either 4 or 8 port configurations to provide conversions between the customers' analog safety devices or panels and the SIP protocol used by the service providers. The solution also included 10T's 5G-capable LTE (Long Term Evolution) routers, which can interconnect with multiple cellular providers using either a direct IP connection, typically via Ethernet or 4G LTE and 5G.

The Sangoma Vega 60G Gateway can use either FXS ports to connect to analog phones and other analog devices or FXO ports to connect to analog phone lines. For this solution, the customer needed to use the FXS ports to support their analog safety devices such as alarms, fire panels, and elevators. The Sangoma Vega 60G gateways can support various session types, including voice, fax, and data. For the safety applications needed by the customer, the ability to convert legacy data modem sessions for transfer via SIP was a critical "must-have" feature.

The updated solution was cost-effective because the customer could continue to use their existing safety

equipment instead of immediately investing in new replacement equipment. For sites using this solution, the customer could also eliminate the expense of paying for the analog telephone service. In addition, the customer gained the benefit of moving to modern communications infrastructure and could choose between direct IP connections or mobile networks to connect with external monitoring systems or external solutions.

## THE RESULTS

---

The service company has successfully used their existing safety devices and utilized a customized solution comprised of a Vega 60 Gateway, a 10T LTE router, and a backup battery to connect via Internet or Mobile networks to centralized monitoring devices. The solution can be scaled for both small locations such as storefronts and larger locations such as distribution centers. By using this solution, the customer has utilized their current array of safety and security devices and maintained connections to various centralized monitoring solutions that confirm that the safety devices are active and still working correctly. The deep knowledge of analog networks, data modem communications, and integration to SIP networks provided by the Vega 60G analog gateways has been a critical element enabling both backward and forward compatibility with the customer's on-premise safety equipment and the centralized systems used by the customer for monitoring the health and activity of their safety equipment.

The customer can utilize this drop-in solution to bypass the connections to analog phone lines traditionally used to enable communications between safety devices and the related monitoring systems. This provides the customer with the flexibility to migrate away from the use of analog phone network connections for cases where this service will be discontinued in the near future.

The solution reduces operating costs by eliminating the need to maintain and pay for analog telephone line connections. In addition, the updated safety solutions can integrate with modern communications approaches such as direct IP connections or via mobile networks. These other communications approaches are typically already being provided by communication service providers for other services used by the customer, such as voice communications.

## THE PARTNER

---

10T Solutions provides customized yet scalable solutions for the IoT. 10T's IoT Solutions, Services, Applications, and Analytics engines allow customers to rapidly realize ROI benefits, quicker time to market, and a lower TCO. Key vertical segments include Industrial, Enterprise, and Agriculture..