



The Anytime, Anywhere PSAP

Intrado's VPN VIPER puts remote 911 call handling within reach.

When COVID-19 struck the U.S. in early 2020, public safety was among those immediately thrust to the forefront of the pandemic. States and municipalities of all sizes found themselves scrambling to find ways to stem the spread of the largely unknown virus to protect their communities.

Even agencies without infected telecommunicators and managers needed to figure out how to keep employees healthy by following guidelines for social distancing and disinfecting protocols while still ensuring every 911 call was answered.

Fortunately, it was possible to establish workstations in alternate locations, accessed through virtual private networks (VPN) over preconfigured laptops via the Intrado VIPER®/Power 911® call handling system. As a result, hundreds of public safety answering points (PSAPs) were able to establish remote operations. Innovative PSAPs came up with even more ingenious ways to use it.

Palm Beach County Pivots

"Like everyone else, the pandemic was the great unknown for us," says Chuck Spalding, NG911 Director, Palm Beach County Public Safety Department, in Palm Beach, Florida. "We weren't clear on what the impact would be." While 911 professionals typically don't work remotely, Spalding knew that if PSAP staff could reliably and seamlessly answer calls from another location, the county would have more options for protecting staff while still keeping emergency communications up and running. "Staffing was quickly becoming an issue with the rules around quarantining," he recalls.

So in March 2020, Spalding and his colleague Dan Koenig, senior manager of Palm Beach County's 911 Program Services, turned to Intrado with their challenge: Could they help the county's PSAP managers continue normal operations by creating a remote workforce? "Our biggest concern was, if somebody dials 911, somebody has to answer and they need the equipment to do it," says Koenig. "The logical first outreach was to Intrado."

An Intrado customer since 2010, Palm Beach County has 15 PSAPs that use the VIPER/Power 9-1-1® call handling suite. They are staffed by just over 300 telecommunicators. Spalding and Koenig remembered that Intrado offered a remote option—a feature they'd never put to use. Using laptops that connect via a highly secure VPN (virtual private network), PSAPs could move their CPE to the cloud, eliminating the need for a physical center for call handling and dispatch. Everything would live in the cloud.

It was exactly what Palm Beach County needed to keep both staff and the community safe during this tumultuous time.

Making the Move

Just a few days after Spalding reached out, Intrado sent a team of four to Florida, led by Sales Engineer Jeff Luers. Though the VPN laptop remote call handling product already existed, at the time Intrado primarily offered it to customers as a back-up, not a primary solution. "During the pandemic, the use case really changed from the standpoint of a PSAP," says Luers. "It was no longer just taking 911 calls, it was that they needed to distance their staff more, they needed to let some people work from home on a regular basis, not just for a half-day but for several months."

Once in Palm Beach, Luers and his team began to configure and deploy dozens of the laptops as quickly as possible. "Every PSAP architecture is different and the way each PSAP uses a system is different," he notes. That meant customizing each solution based on the needs of that center, something Luers has worked on with call centers around the country since the start of COVID-19.

Before long, Palm Beach County had 50 "go bags"—padded backpacks that each included a preconfigured laptop, modem, Sonic Box to handle the audio of each 911 call, headset, and mouse. Spalding was impressed. "Intrado stepped up. I was surprised how fast this evolved."

Each laptop had been configured, too, with the ability to access AT&T's FirstNet network, which gives priority connection to first responders. That ensured call-takers' connectivity was both stable and secure. "The laptop with FirstNet dials into the next-generation ESInet, so it acts just like the dispatcher is at their home PSAP," continues Spalding. "If we needed to grab 50 go bags and bug out to another county, we could answer calls by just using this technology."

The implementation was nearly seamless, says Koenig. "There was no learning curve on what the equipment looked like; it operated the same way that it does in the centers." Luers agrees: "Everyone was very happy that they were able to have a solution, not only to be able to answer calls but to do it at nearly the same level, with the same data they're used to seeing, the same interface, using the same credentials to log in, and not having to manage a separate system."

What Else Can It Do?

Even better, the PSAPs found unexpected uses for the remote call-handling solution. With many agency offices closed during COVID, call-takers could easily pick up a laptop bag and take calls from an empty office, with plenty of distance between them; one group worked out of a local library for five months. Another agency would set up in a training room or auditorium while their consoles were being disinfected. In another center, the day shift worked in their regular consoles while the night shift took over a meeting room. "They could disinfect the other area while it was empty and there was no physical handoff of equipment," notes Koenig.

Adds Spalding: "You design something for a specific need—in this case, remote work. But as it turns out, once the PSAP managers had the capability in hand, they were creative and were able to use it in fashions we had not envisioned."

When Hamilton County, Ohio, home to the greater Cincinnati area, upgraded their VIPER platform in summer 2019, Andrew Knapp recalls their Intrado representative describing the remote call handling options the county's two ECCs would now have if they needed it. "We were kind of keeping that in the back of our mind," remembers Knapp, director of communications for Hamilton County. "Then the COVID situation hit."

With no 911 call center backup of its own, before the pandemic the county had relied on a partnership with Cincinnati, which did have one. "In the early days of the COVID situation, we learned that the city of Cincinnati had already activated their backup center and separated staff into two groups; the day shift was working out of the primary center and the night shift was working out of the backup center."

Overnight, Hamilton County had lost their alternative for taking calls.

"It was at that point," says Knapp, "that I remembered in our discussions with the platform upgrade we went through and I contacted our account executive, Chris McGearry, and said, 'Hey, I need to pull the trigger on doing these laptops in order to have an offsite solution in the event that our center succumbs to this worldwide pandemic that we're going through.'"



A total of 68 staff were set up in a conference room just a couple of miles from their primary PSAP. "The goal was to have another place up and running that, if we did have some kind of widespread outbreak, I could keep the people who were returning from being sick separate from the well people," explains Knapp.

Like Palm Beach County, staff used the VIPER VPN-access laptops configured by Intrado; Hamilton County purchased 15. The Ohio team also saw little to no learning curve for its dispatchers. "It's the exact same client that they use on their hardened install devices on a day-to-day basis," says Knapp, who has worked in public safety communications for more than 30 years. "Being in the business for a long period of time, you buy these things as your doomsday plan. When all of a sudden doomsday hits, everybody is pulling out the instructions to figure out how to make it work. And with these, it's just not like that. They're very simple to use." For 90 days, the county ran operations out of three separate spaces, thankfully never needing to deploy the backup option to its full capacity. "I have another five laptops that are still in the briefcases, ready to go," he adds. "We can pull those out and go somewhere else and be up and running if we need to."

Knapp, who has an AT&T FirstNet cell phone, was even able to log in from home using FirstNet connectivity. "Once I was on that first night, I had no issues of dropped calls or garbled traffic or anything like that," he recalls. "Everything works. It's a solid deployment. I'm completely satisfied with it."

Ten of Hamilton County's VIPER/Power 9-1-1® laptops now live in a new backup center used to train new employees. "That's something that we never, ever have done before. You would have to do this classroom training and never be able to demonstrate the equipment unless you're in the communication center," notes Knapp. "Now the trainees can sign on and take calls with a trainer right beside them. It's an absolute game-changer for how we do our training.

"I've bought a lot of stuff in my career and this is one of the things that, to me, was a solid purchase. The return on our investment was almost immediate."

Planning for Bad Days

It's the job of public safety to consider all the "what if?" scenarios. Hurricanes, tornadoes, wildfires and flooding. The next pandemic. Civil unrest and protests. A bomb threat or active shooter. As Intrado's senior account executive for Florida and the Caribbean, Alan Woods has to think about these possibilities too. Lately, his mind has been on Puerto Rico, which just purchased 50 VIPER/Power 911®laptops.



"Puerto Rico has two PSAPs in the country and both of them are normally active," explains Woods. "Right now, they're only running one PSAP as a precaution for COVID." This ensures both PSAPs can't be contaminated at the same time, which could shut down all emergency communications in the territory.

A VIPER user since 2019, Puerto Rico will have much greater flexibility in managing 911 calls once the new laptops are deployed. "COVID is the primary driver that brought this product to market early last year," says Woods. "But there are other things that could force you out of the PSAP, such as inclement weather conditions."

Woods calls the laptop remote call handling system "another tool in your toolbox" and an especially good option for PSAPs that don't have an MOU or mutual-aid agreement with a neighboring jurisdiction or another PSAP as their backup, or who want even more insurance in case that call center goes down too. "This is a way to harden your infrastructure and flexibility so that you can work on contingency plans for when these things happen," he says.

One Thousand Plus and Counting

So far, Intrado has deployed the VIPER/Power 911 VPN laptop remote call-handling solution in some 1,183 workstations at a dozen PSAPs/ECCs nationwide. "The pandemic has certainly lent itself to this product," notes Beth Meek, Senior Vice President, Operations at Intrado Life & Safety. "Just as we have for over 40 years, Intrado continues to look for innovative applications for existing technology. In this case, once COVID made clear the need for this solution, we continued to make it even better for public safety. In this way, we continue to meet our mission of improving the life, health and safety of our communities."

Learn More at <https://www.intrado.com/resources/public-safety/vpn-laptop-viper-power911>.

"The whole concept of being able to take 911 traffic from anywhere other than your dispatch center is a concept that's been completely foreign and just almost impossible to attain. And now here you've got these laptops that can literally get up and running from just about anywhere and continue to take not just your day-to-day telephone traffic, but your 911 traffic along with text-to-911. Everything is all in one concise, consolidated package. And it looks exactly like what you use on a day-to-day basis."

– Andrew Knapp, Director of Communications, Hamilton County, Ohio

