LifeCare Ambulance uses Switchvox to deliver 911 services

Switchvox Saves Ohio Emergency Services Provider
$24,000 a Year in Phone Service Costs

Aging telecom equipment not only causes plenty of headaches, but it can also result in a communications emergency. Trying to piece together make-do solutions that keep a legacy phone system running is not uncommon, especially considering that a small business may have once spent over $50,000 on that now-outdated telephone system. While that's a significant investment for a small business, the long-term cost to keep the old system running quickly adds up — from having to source and buy near-obsolete spare parts to paying inordinate service and maintenance fees. That upkeep process had become routine for LifeCare Ambulance, Inc. — and all for a failing phone system that no longer met the company's critical communications needs.

LifeCare Ambulance provides 911 emergency dispatch services to residents throughout Lorain County, Ohio. They provide 911 EMS service, ambulatory services, and wheelchair transportation services for Medicare and Medicaid patients to and from their medical appointments. Their nationally accredited education academy is open to the public and they train and provide certification courses to Emergency Medical Technicians (EMT), first responders, and anyone

LifeCare Ambulance provides emergency dispatch, EMS, ambulatory, and wheelchair transportation services throughout Lorain County, Ohio.

else interested in knowing how to respond to emergencies. The organization has over 225 employees and operates 50 emergency vehicles including ambulances, first responders, and wheelchair transportation vans throughout the county.

The company's legacy phone system, a Nortel BCM 450, was failing rapidly. Because Nortel went out of business several years after LifeCare purchased the system, the company had to make do with stopgap repairs since it was impossible to find anyone with the experience or parts to service it. EBay seemed to be the only place they could find Nortel repair parts, and in-house LifeCare technicians eventually became schooled in Nortel products since they were the ones making the repairs.

"It happens all the time," says Tim May, VP of N2Net in Cleveland, OH and a Digium select partner. "When you spend that much money, small businesses naturally want to milk as much from their dying investment as possible before having to buy a new system. That becomes more complicated, however, when your original vendor is out of business and there is no support. When LifeCare tried to contact the new company, they essentially said, 'Sorry. That system is out of date and we no longer support that system with equipment or parts."

Finally getting the greenlight to investigate options for a new business communications system, Richard Pozywak, LifeCare's director of IT, thought he knew what he wanted and didn't waste time starting the process to upgrade the business phone system. When he received the initial quote for a new system from Cisco, Pozywak quickly realized the benefit of broadening the selection process to other telecom vendors.

Sticker-Shock and Add-ons

"I wanted a Cisco phone system," says Pozywak. "I was stubborn about it in the beginning, not considering anything else, until we talked to our Cisco vendor and got the price for a new Cisco phone system. Holy cow! We were looking at $300,000 to $400,000 for a Cisco system."

Knowing the owners wouldn't go that high, Pozywak gave up the Cisco pitch and began the search for other options.

"Our local phone service provider was an Allworks reseller, so we looked at that system, too," says Pozywak. "The problem with it was the add-ons. In addition to the basic appliance, you had to buy this and then add that. The final cost was about $150,000, which was still too high."

Pozywak also considered a Shoretel phone system, but again he came across the same problem of expensive add-on fees for standard features and licenses. By the time he bought all of the add-ons LifeCare required for its communications needs, the company would have to spend a minimum of $100,000 out of pocket.

"We were disappointed in the quality of Shoretel's phone units, too. They didn't seem robust enough for paramedics in the field," he stated. "We have a saying that if you put two paramedics in a room with two bowling balls, they would either lose them or break them. We needed something rugged."

It was back to the drawing board. Pozywak says they considered a cloud-based solution and talked to several agencies comparable to LifeCare who use those systems, but none of them handled emergency calls. Instead, most of them primarily set up transportation for their clients- so he and his team eliminated that option.

The LifeCare team was somewhat familiar with an open source telephony platform known as Asterisk, which is maintained by Digium. Research indicated that LifeCare could use any type of phone sets with the open source solution, customize it to do whatever they needed it to, and could easily integrate Asterisk with most other components, software, and systems. As they pondered the option of using in-house resources to build an Asterisk solution from scratch, they began to compare it to Digium's Switchvox phone system. Based on the Asterisk telephony platform, Switchvox is an all-inclusive VoIP business communications system with unified communications (UC) — and it is essentially an out-of-the-box solution that's ready to implement. There were no add-ons and all features were included and built into the web-based interface. The Switchvox solution seemed more than promising.

After contacting Digium directly, the telecom vendor introduced Pozywak to Tim May, whose N2Net company in nearby Cleveland is one of Digium's top resellers, and is considered one of the best VoIP telecom specialists in the Midwest.

"Within five minutes of demoing the Switchvox software and system, I was intrigued not only with its ease of use but the fact that it was an all-in-one system," says Pozywak. "The only add-on was for a fax license at $35 each, which was nothing. I was also wowed by the unbelievably all-inclusive pricing."

The Switchvox Wow Factor

LifeCare purchased the Digium Switchvox 380 IP PBX with UC along with nearly 50 Digium high definition phones, 90 Gold subscriptions, and analog cards that connect the Asterisk-based software with legacy analog phone lines, phones, and phone systems — all for approximately $50,000.

Getting rid of the headaches of a legacy phone system and moving to a more reliable communications solution were critical goals for LifeCare's communications upgrade. But there were other needs and unexpected benefits realized once Switchvox was deployed.

"By law, we have to record every call that comes into our 911 call center, properly log it, and ship it offsite to be placed in storage for 7 years," explains Pozywak. "It has always been a very challenging process with the Nortel system involving multiple steps in which we had to punch down the wiring into open-ended slots, and jumper it over using a plug ... it was a mess. With Switchvox, recording is integrated into the system, so all that went away."

Pozywak says it cost about $3,000 to upgrade their core 6500 switch in the data center from 110 volts to 240 volts, essentially upgrading the entire line-based chassis so it could handle the power required to record, log, and transfer the data. The upgrade also greatly improved call quality.

"The system is completely web-based so I can be at home or anywhere in the world and all I have to do is go to my computer and pull up our webpage in Switchvox to see what is going on," says Pozywak.

With the capability of managing the entire Switchvox phone system in-house, data is now backed up to their offsite N2Net-hosted data center, which prevents the need for a cold spare.

N2Net is essentially a phone company with their own network operations center, data center, and dial tone service. "All of our employees are Switchvox certified," says May. "If the Internet or phone system goes down, we have integrated hot lines into the Digium system so LifeCare can roll over to cellphones without missing a beat."

Switchvox Features and Savings

In terms of Switchvox special features, Pozywak says they have integrated Google Maps into the Switchvox switchboard so that when a call comes in, they know from where the call originated. With GPS built into cellphones, the location trickles down to LifeCare within minutes.

A couple of years ago, a Lorain County resident drove to one of LifeCare's stations after realizing he was having a heart attack. He rang the bell but there was no one at the station to save him because they were out on a call.

"We are a 911 provider for our city and our residents see us as a safe haven. After that tragic event, we implemented bright yellow Valcom IP emergency call boxes, which are lit up in blue at night, and ring directly into dispatch," says Pozywak. "We did a little research and discovered that Switchvox pairs easily with most other components, software, and systems. Switchvox integrated perfectly with our Valcom system. It took 20 minutes to configure it and now we can prevent a healthcare tragedy like that from happening again."

Dispatch often uses Switchvox softphones while the office staff uses the Digium D70 executive phones. Out in the paramedics' garage, they use the D45 model, which prove to be durable enough to take the repeated use. Many of LifeCare's supervisors utilize the Switchvox mobile app because they are so often away from their desks.

Competitor VoIP telephone systems with the flexibility and expandability of Switchvox would have cost LifeCare anywhere up to six times as much the price they paid for Digium's solution. Also, with N2Net providing their SIP trunking service, the company's monthly long distance charges are significantly reduced.

"We were paying $2,500 a month for our phone service, including long distance," says Pozywak. "Our new bill is $534, cutting our phone bill by $1,800 to $2,000 month. Savings of $24,000 a year is an added bonus!"

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