# PATHWAYS, INC. CHOOSES SWITCHVOX



**CASE STUDY**  **ASTERISK**

**OVERVIEW**

**Reliable telephone service often means the difference between a life or death situation for the Lake County Crisis Hotline and the people they serve.** The Ohio-based hotline provides phone-based counseling services to a population of about 235,000 people, providing immediate relief for those in emotional distress. Part of the emergency services division of Pathways, Inc., a private, nonprofit, community-based outpatient mental health facility, Pathways has been providing emergency support; psychiatric and medication services; and continuing community support for adults age 18 and over since 1986. Staffed by mental health professionals and highly trained volunteers, the Crisis Hotline provides intervention, suicide prevention, and referral information to a wide range of community resources 24 hours a day, 365 days a year. In order to answer every call and offer immediate assistance with any problem, their telecommunications system must be unfailing.

## When telephony means the difference between life and death, Pathways, Inc. chooses Digium Switchvox

Given to the center as a charity donation many years ago, the "somewhat digital" Mitel system could no longer provide the dependability Pathways required from their phone system. A generous contribution over 20 years ago, it was difficult, if not impossible to find parts to keep the Centrix (Central Exchange) analog telephone system running. "It would crash often and we would have to reboot the whole system," says Mark Bregy, Pathways MIS & Facility Manager. "The whole staff would cross their fingers every time we rebooted, in hopes it hadn't died in the process."

With the Mitel equipment dying, Bregy researched and priced new telephone systems, but there was one problem — Pathways didn't have a budget for telecommunications. Fortunately, Pathways received $30,000 in grant money, which management pledged to the new phone system; but by then, Bregy's quotes began coming in

with Shoretel around $90,000 and Cisco closer to $120,000. The grant was only a drop in the bucket toward what he needed, but another potential disaster loomed — what if the system died before they could get a new solution in place? What would that mean for Pathways and the clients who depended on their services?

That was when Bregy reached out to Tim May, a former colleague and longtime Digium reseller at Cleveland-based N2Net.

"When I first went out to meet with Mark to assess his situation and help him find the parts he needed to keep the Mitel running, I found a beast," says May about the cobbled-together phone system. "It had an antiquated bank of telephone lines and numbers and it was so clunky it had been relegated to a spot in a corner next to the Coca-Cola machine. Because they don't make parts for it anymore, there was really no way to 'test' it to see what was wrong with it."

"With Tim's help, we narrowed the problem down to a 'card' we thought might keep it running," Bregy explains, "but it took several people researching online and calling around over several days to find it. Finally we found one on eBay for about $800."

"I had very little hope it would be anything more than a Band Aid on the overall situation," May explains. "They had been patching the system together for a long time anyway, to the tune of over $2,700 in parts that really weren't fixing it, so it was time to have a serious discussion about replacing it completely with Voice-over IP. I knew without question that Digium's Switchvox was the answer to their systemic problem, as well as their budget."

## Introducing Switchvox

N2Net is a business communications service provider that offers a complete line of high quality, high-performance communications solutions. They help businesses increase productivity and profitability by using existing broadband connections that deliver increased functionality and quality service using voice-over IP (VoIP). N2Net had been a certified Digium Switchvox and Asterisk reseller for many years. May knew Switchvox had the power and flexibility to provide a unified communications platform that would support all aspects of Pathway's facility, including its crisis support hotline; and confident Switchvox offered an appealing price for the system and its installation.

"We sat down and first formulated a plan for what we would do if the system failed completely," Bregy says "Then we took a closer look at the numbers."

"I wanted to see how much the old Mitel was really costing them on a monthly basis, excluding replacement and repairs," May says. "I was sure we could save them money on a Switchvox solution, but by building a unified communications platform using VoIP, we could whittle away at the overall costs they were accustomed to paying, even if the Mitel had been working perfectly."

## The Challenges

For Internet access, Pathways was using a Primary Rate Interface (PRI) for carrying voice and data, using a T1 carrier line with 30 channels costing about $40 each. The Centrix analog lines were costing about 25 cents (US) per minute. "In one of our first meetings," May says, "we tore apart all Pathways telephone bills to show them how much money they could save by replacing the AT&T PRI with SIP."

N2Net redesigned and re-engineered the structure, tearing out the Centrix lines and PRI, replacing it with SIP (Session Initiation Protocol) for voice and video over IP. With SIP, any device — audio, data, or video — can talk to any other device using the Internet much cheaper than through a phone line where data charges apply. "Fortunately, we were at the end of our contract with AT&T so replacing it was great timing," Bregy says. "That saved us a minimum of $1,000 a month. Overall, we saved about $16,000 a year by going 100% SIP.

Offered as an option to their client services, N2Net outsources a cost-effective program called Co-Location that maintains complete administrative control over a client's Internet system providing redundant Internet connectivity with over 200MB of upstream bandwidth, a 99.99% power guarantee, and physical security. "It saves clients the expense of having to build their own IP infrastructure," May explains.

"Building a new VoIP infrastructure in addition to buying a new telephone system seemed like a huge undertaking," Bregy admits. "In working with Tim to develop an emergency backup and recovery plan that could be implemented instantaneously, N2Net's Co-Location was an answer to the problem. "It was a matter of when and not if the Mitel crashed permanently, and in spite of my intuition, it didn't matter — when it went down, we were flipping out."

"We carved out an extension to reroute Pathways' calls to the N2Net data center so that if their system or even their Internet went down, there would be no interruption in their service," May explains. Under the N2Net Co-Location program, Pathways pays for only what they use, and it gives them 24/7 access and monitoring. In other words, N2Net provided Pathways with an immediate emergency backup and recovery system.

"We were still going bananas because calls were being rerouted to over ninety users to cell phones, email, and various mobile devices. It was hectic, but we had it covered."

Pathways purchased a Digium Switchvox SMB 305, a Linux-based appliance that turns an ordinary computer into a telecommunications server. The second of three models based on the number of users, the SMB 305 has the power of a server-class PBX, designed for medium-size businesses accommodating up to 150 users. With about 90 current users, the SMB 305 easily makes Pathways future-proof in terms of growth.

"We purchased the Switchvox SMB 305 using the $30,000 grant and bought a Cisco router to support it," Bregy says. "I was amazed at what all the Switchvox would do, especially the more homework I did comparing it to other systems like the much more expensive Shoretel and Cisco. I couldn't believe the features that were included in the Switchvox price, that were priced as separate 'components' in the more expensive systems."

Laughing, Bregy says the system is so easy to use his only complaints came before anyone had used it, from people who were afraid of change. "I mean once we started using it, people realized all you do is pick up the phone and dial! It isn't any different in those respects than the old system."

Known is for its wide-ranging flexibility at such an affordable price, Switchvox is programmable to meet the wants and needs of any small to large enterprise business operation. Pathways for instance, employs a live receptionist, but to help with efficiency, Bregy programmed an auto attendant to route calls to their proper queues and ring groups for immediate support, without ringing the receptionist, and freeing her up for other support work and preventing call overload at the front desk. Immediately routed into ring groups consisting of qualified crisis councilors and caseworkers trained to handle people in mental or emotional distress, people calling designated lines for the Lake County Crisis Hotline never land in a voicemail box and are never placed on hold.

Calls coming into the main facility will be distributed according to the menu so that callers may dial an employee or a department directly, without the receptionist having to physically transfer the call. Furthermore, the user-friendly computer interface lets the receptionist see all incoming and outgoing calls, where they are routed and who is on hold. The receptionist has override ability to intercept calls any time needed, and drag and drop them into the proper queues if a caller does not know where they wish to be transferred.

Because Switchvox has its own unified communications (UC) platform, all non-emergency users have to do is hit a single button to give the caller an option for leaving a voicemail, or transferring the calls to their cell phone or mobile device. "I am rarely at my desk," Bregy says, using himself as an example. "There is

no complexity about it. I look at the phone interface and follow the path for what I want my calls to do. Do I want my desk phone to pick-up quickly or do I want it to ring several times first? Do I want all my calls going to voicemail, or do I want it ringing my cell phone immediately? Do I want it to do so after three rings, after five rings? I can even bounce the call to an assistant if I am going to be somewhere I can't answer my cell phone." Conveniently transferred to any mobile device including tablets, personal laptops, email, and cell phones, mobility options mean employees are reachable anytime, anywhere as if they were down the hall or sitting at their desk. "Mobile is so big now, that most people don't use it to its fullest capabilities. Switchvox has perfect compatibility with numerous apps and plug-ins for nothing more than the nominal cost of a license," Bregy says.

Pathways also required some workarounds due to the nature of the crisis hotline. They added a Google Maps Application Programming Interface (API) so that from the moment the call comes into the crisis center, the system searches a database to identify the location of the caller, even if they are calling from a cellular phone. In the event a person in crisis needs emergency assistance or the counselor feels the need for police backup, the mapping feature pinpoints the cellular signal so they can find them. From a landline, the call is cross-referenced with phone number, address, and area code to identify the location. Google Maps uses GPS to locate pings from cellular phone towers.

"Furthermore, we get tons of reports — reports I didn't even know I needed until I started getting them, and now they are indispensable." The old Mitel system used a DOS-based program called TomDocs that was difficult to pull and to read. With a Switchvox UC solution, Pathways team members can identify calls and which extensions they are routed to; record calls for quality purposes; watch for excessive callers and how they are being handled; and customize reports for training purposes. "These capabilities are all in the can — inside the appliance. As the administrator, all you have to do is turn them on." He says this is important because before, there was no protocol. If the Internet went down, calls were simply gone forever. They couldn't even return calls if they were missed, dropped, or lost when the system crashed.

"The work we do in mental health at Pathways is very important to the community. A difficult but compassionate business, obviously communications are essential to doing it well," Bregy says. "If you look at it in totality, I saved $16,000 a year in phone services; I don't know how much I saved in not having to build a complete IP infrastructure by implementing an emergency backup and recovery solution through N2Net's Co-Location services. With Switchvox, I bought a telephony solution that cost $30,000 that has more flexibility and inclusive features than competitor versions for $90,000 and for $120,000. I'm missing nothing and I'm excited about Switchvox!"



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