

Case Study -- Kool Smiles

- a children's dental management practice in the U.S

The ROI on SIP Trunking

Secure VoIP Technology Cuts Phone Costs
Forty Percent for Kool Smiles

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Ingate's solutions provide the advanced level of security necessary for this medical environment and the tools to make the interface to the service provider hassle-free. We chose Ingate after a thorough research process; they offered a complete, fully interoperable solution, which has met all of our expectations.

– Mark Blomquist, co-founder and Chief Technical Architect for Kool Smiles. ”

Kool Smiles, a children's dental management practice in the U.S., was an early adopter of SIP trunking technology. SIP trunks have become a simple, cost-effective way for businesses to transition from traditional telephony to Voice-over-IP (or VoIP), which essentially shifts all phone calls to the Internet.

With an expanding network of dental offices, Mark Blomquist, co-founder and Chief Technical Architect for Kool Smiles, knew there had to be a better way to handle their ballooning communications costs, and saw huge potential for cost reduction in shifting all toll calls to the Internet. And whichever solution he chose, it needed to be very scalable to grow with his expanding business. “We provide high-quality dental care to children who don't have the resources to see a dentist. Since we opened in 2002, we've seen a growing demand nationwide to open more clinics, to help more kids.”

Here's how Kool Smiles did it:

A Good Investment

Kool Smiles needed a robust alternative to traditional telephony to accommodate their ever-increasing rollout of satellite dental clinics. They had been using a standard TDM phone system which meant skyrocketing telephony costs. “We were using an older 3Com NBX platform, and were looking for a solution that worked seamlessly with the newer Internet-based 3Com PBX offerings.”

Kool Smiles also wanted to be able to use any new Internet-based applications – such as secure Instant messaging between offices, or even video chat – down the road, which meant their solution had to be able to handle whatever new technologies came down the road.

What are SIP Trunks?

SIP trunking is a term applied to the services offered by many service providers, both traditional phone companies and others such as cable companies and new entrants referred to as Internet Telephony Service Providers or ITSPs. These companies accept VoIP traffic over the Public Internet or private connections which they then place on the telephony network to reach residential and business customers. In-bound calls are received at the service provider central office and then sent over the Internet to the intended recipient, again using VoIP as the transport medium.

Statistics

- Kool Smiles' SIP trunks handle 35,000 calls a day
- 1,800 handsets
- 200 concurrent trunks peak in a day

The result: Kool Smiles cut their communications costs by 40 percent, and in less than a year the entire installation — including a new IP-PBX, phones, network upgrades and other network hardware -- has paid for itself. To date, the company has shifted more than 35,000 calls a day to toll-free Internet telephony, which is now live on 1,800 handsets.

This kind of rapid ROI is appealing in today's economic climate, as dental offices are looking to IT for new ways to stretch their dollars.



Case Study: Secure VoIP Technology Cuts Phone Costs Forty Percent for Kool Smiles

SIP Trunking allows enterprises and small businesses to eliminate a PSTN gateway at their site and outsource that function to a carrier. It is typically a lower-cost alternative to Primary Rate Interfaces (PRIs) because SIP trunks can be purchased in single-trunk increments (as compared to 23 channel increments for a PRI).

With SIP trunks, a single network can be maintained within the organization, rather than having both a voice and data network. Internet bandwidth can be used more efficiently, streamlining expenses. In addition, Moves, Adds and Changes can be completed without major wiring upgrades. These benefits all lower costs for the business.

Simplified Deployment

Blomquist deployed an enterprise session border controller (e-SBC) – in this case, an Ingate SIParator -- with Ingate's SIP Trunking software module at Kool Smiles' headquarters in Georgia. The e-SBC is a single, standalone piece of hardware that made it possible to connect their IP-PBX to their Internet telephony service provider's SIP trunk.

With the right e-SBC, SIP trunks can be installed in less than 20 minutes. An e-SBC makes the process of deploying a SIP trunk simple, by:

- Solving any compatibility issues with Kool Smiles' existing hardware with the ITSP
- Giving their network the ability to use SIP applications
- Providing tight security for Kool Smiles' voice traffic

"Key for us was a solution that made the interface to the service provider hassle-free. The whole deployment needed to be simple, so we could focus on our core business – helping kids in need get great dental care. We also have the ability to scale up as we roll out new dental offices."

With the Ingate SIParator in place, Kool Smiles was also able to service its practice sites from a single PBX at a central location, resulting in even further cost reductions.

Security

The e-SBC worked hand-in-hand with Kool Smiles' existing security infrastructure, a tremendous benefit in maintaining the security and integrity of the network. Kool Smiles had a network firewall that was unable to understand SIP traffic. However, they wanted to keep their network firewall to continue to provide security for all data traffic. The e-SBC was deployed in parallel to the traditional firewall, handling the traversal and security of SIP traffic while leaving the original firewall in place to do its job of securing data traffic.

With this architecture, Kool Smiles had the highest level of security for VoIP – a must in a medical environment. The SIP trunk setup supported Secure Real Time Protocol (SRTP) which provides one of the most secure environments for Internet telephony and VoIP applications available.

"We work in a medical environment, so security of our communications is an extremely high priority," said Blomquist.

The ROI on SIP Trunking

"We recouped our total investment in SIP trunking -- including a new IP-PBX, phones, network upgrades and the Ingate solution -- in twelve months," said Blomquist, who has seen a forty percent reduction in the company's phone bills.

"Reducing costs and streamlining our support organizations enables us to focus more resources on our clinical and community responsibilities," he continued.

The result

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The speed with which Kool Smiles achieved ROI was astonishing to Kool Smiles' management team. Their CIO recently approached Blomquist asking whether there was a "glitch" in his budget forecasts. "They thought there was a coding issue somewhere," Blomquist laughed. "I told them this was intentional, that the savings for our initial investment paid for the system that quickly, and our ongoing communications costs were actually going to be that low."

"They had just noticed the cliff in costs," he said.

Reliable Communications that Can Grow with Your Practice

Today everyone in the Kool Smiles network is using Ingate's SIP trunking solution. "Pick up a phone anywhere in our network of offices, you're using VoIP," said Blomquist. The call quality is excellent – a must in the dental field, as patient relations are critical.

Looking ahead, Kool Smiles is hoping to purchase additional e-SBCs to shift even more of their dental clinics and telecommuters to cost-effective VoIP.

