SIP Trunking with Microsoft OCS

"This solution really saved the day for us," said Paul Mercier, IT Administrator, NMSAS. "We needed to leverage SIP trunks to reduce costs, and they had to work with our existing Microsoft OCS investment. The BBTelsys-Ingate implementation was able to make it all happen for us, very easily, and delivered advanced features that help us serve our clients better.

- Paul Mercier, IT Administrator, NMSAS

Problems: Solving Microsoft OCS incompatibility with SIP trunking

Solution: Ingate SIParator® E-SBC, solving TCP/UDP Conversion and Advanced Dialing Plans

Northern Michigan Substance Abuse Services, Inc. (NMSAS) coordinates and oversees the delivery of substance abuse services for 30 counties in Michigan. The nonprofit serves nearly 8,000 clients a year, providing them with inpatient and outpatient care, innovative programs and extensive work with substance abuse treatment providers and community partners.

NMSAS wanted to cut communications costs by transitioning their telephony to VoIP using SIP trunks. SIP trunks are a cost-effective way for businesses to adopt VoIP. Installation takes minutes, and the return on investment is very fast – usually 6-9 months.

Resolving OCS Incompatibility

NMSAS was using Microsoft® Office Communications Server (OCS) to converge their voice and data. Microsoft OCS utilizes TCP (Transmission Control Protocol)/IP. TCP/IP is one of the core protocols used in Unified Communications (UC) and allows for the reliable, ordered transmission of data.

SIP trunking service providers generally use UDP (User Datagram Protocol) because it consumes less bandwidth. The inherent incompatibility meant that, for NMSAS, they would need to either purchase an entire new SIP-based PBX or abandon the idea of deploying SIP trunks.

Providing Critical TCP/UDP Conversion

NMSAS deployed the Ingate SIParator® with the Ingate SIP Trunking Software module, which works hand-in-hand with service from BBTelsys and NMSAS' existing Microsoft OCS. This solution provided a seamless format conversion of TCP/IP to UDP, and did so in a way that preserved the security of the voice traffic that would cross the SIP trunks.

The SIParator is an Enterprise Session Border Controller (E-SBC) that enables SIP trunking by resolving the Network Address Translation (NAT) traversal of SIP traffic. It also normalizes the SIP signaling between the IP-PBX, which in this case was the Microsoft OCS server, and the BBTelsys service – resolving the interoperability issue. The SIParator also secures VoIP calls made over the SIP trunk.

The BBTelsys and Ingate solution also addressed advanced dialing requirements NMSAS needed to provide their clients with unparalleled privacy and security.

As a substance abuse services facility, NMSAS offers counseling for clients over the phone. Clients are oftentimes at work; most require absolute privacy about their relationship with NMSAS. NMSAS needed to make sure that, when they called clients, the client's caller ID display would come up as "anonymous." NMSAS also wanted to be able to make calls without using this "anonymous" option.

Advanced Dialing Solutions

Ingate developed a simple dial plan solution harking back to the days of traditional wireline telephony. When calling a client, NMSAS workers need only dial "8" and then the phone number for the system to display an anonymous caller ID. Business calls, which do not require anonymity, are preceded by a "9."

Results

NMSAS has already seen a significant drop in their phone bills, saving an estimated 40-50 percent with just 20 users on the system. NMSAS expects to roll out the SIP trunk solution to 30 counties in Michigan, to all 200+ NMSAS users, shortly. When they do, they look forward to seeing up to an 60 percent reduction in costs.