SIP vs Analog Telephone Lines for your Business Phone System

For many companies who start thinking about upgrading their phone systems, one of the main concerns is the new telephone system's ability to meet the needs of their employees. Employee efficiency is important, but remember that your clients will also be affected by the switch from traditional to SIP (Session Initiation Protocol) trunking.

So this begs the question— is it best to stick with what you know, or to take the plunge into the era of Voice over Internet Protocol (VoIP)? Let's dive into this topic by taking a few minutes to compare the pros and cons of analog and SIP trunking, so that you can determine which solution is best for your employees and customers.

Analog Trunks

In traditional analog or digital telephone systems, the connection to the public/ outside telephone network is made of copper wire, which runs from a local phone company (Frontier/ Spectrum/ Comcast, etc.) to a specific business location. While this system is generally reliable, it has been in place since the invention of the telephone, so it's not exactly state of the art. Additionally, as the network in the ground or on aerial cables ages, it has become less reliable and more prone to service disruptions.

With an analog system, the two ends of a phone conversation have to be physically connected through the Public Switched Telephone Network (PSTN) so that calls can be made and received.

- **Pros:** analog systems have been the main form of phone infrastructure for decades, so they've stood the test of time. They're mostly reliable, stable, and can even function without power in some cases. Analog trunks are provided and maintained by your local phone provider.
- **Cons:** Probably the biggest problem with traditional analog trunks is the cost — nationally, on average, that is roughly $38 per trunk per month. Additionally, analog lines are limited in their flexibility. A single trunk can only handle one phone call at a time and can't be moved, so businesses must plan to have enough trunks at their locations to handle their maximum call load, creating a system where there is excess capacity that must be paid for monthly. Finally, there's the matter of long-distance cost, which is much higher on an analog system.

SIP Trunking

VoIP SIP trunks transmit voice over the Internet, digitally, instead of using the traditional protocols and hardware of the aging PSTN. SIP trunks enable businesses to replace fixed analog PSTN lines with internet connectivity — as long as

your office has a high-speed internet connection (and frankly, what business doesn't have that now!), you likely don't need any extra infrastructure.

- **Pros:** SIP trunking enables calls to be made over your internet connection, cutting out the local phone company and their often exorbitant and confusing charges. The amount of data that your voice calls use is a drop in the bucket compared to chunky email files, general web browsing, and employees streaming video, and that voice data will simply be rolled into the cost of your existing internet bill. As a rule, SIP trunks are also much less expensive for calling local and long-distance calls. In many cases, SIP trunk providers include all long distance calls in the monthly flat price of a SIP trunk for calls made in the US, Caribbean and Canada. Calls to other countries are still typically 50% less than telco rates.
- **Cons:** Working with an experienced consultant like CSM South and with thoughtful planning, there really aren't any significant drawbacks to SIP trunking. You will need to ensure that your business is equipped with enough bandwidth to handle call traffic, and ensure that your network's integrity is maintained by managing network traffic to optimize voice communications over the data network.