

SIP the Smart Way

What can an open-standards-based technology such as Session Initiated Protocol (SIP) do for your network environment, and will it really pay off for your business? To answer these questions, let's look at what SIP really is and examine what applications can make the best use of SIP and its flexibility.

The big benefit of an open standard technology is obvious. It gives you the ability to interface with any phone system available from any vendor, eliminating problematic integration issues and allowing you to mix and match vendors to get the right combination of price, features and functionality. With SIP, it's possible for handsets and other equipment to coexist on your network without compatibility problems. This makes SIP a great choice when flexibility is a key requirement in your phone platform.

But there is a drawback to deploying SIP across your entire network. SIP uses an analog signal deployed over an IP medium. That means it has a very limited feature set in most cases, with on-hold and call transfer often being the only options. It is possible to fine-tune SIP during the installation so that additional functionality is hidden in the background. Installers can also configure the old analog "hook flash" method to access other capabilities. But this will be limited at best, and it also means an additional step and possible frustration on the part of the user.


The SIP "Sweet Spot"

There is definitely a right and a wrong way to use SIP. With SIP's limited feature set, we do not recommend it for "power users"-executives who make full use of the capabilities of an IP-digital phone. These users include anyone who is holding multiple conference calls and using their handset to access many different technologies across your network.

The right way to deploy SIP is to deliver it to users that may handle a high volume of calls, but do not need any of the traditional "bells and whistles" of a digital phone. These users may include warehouse employees or a front desk receptionist.

Another way to use SIP is to interface a SIP-enabled network with a technology deployed over a single channel, such as your voicemail system. SIP can set up the session between the voicemail platform and your network, and then step back. The advantage of this is now you can use any voicemail technology you wish, while the rest of your network is still using the robust features and functionality they are accustomed to using.

SIP also presents some unique capabilities that you may not be aware of, such as:

- 
- SIP works well with 802.11. You can integrate mobile handsets with your network switches, allowing employees to stay connected no matter where they are in the building, usually for no more cost than a traditional cell phone.
 - SIP is great for point-to-point communication. You could use the technology to set up front lobby security by interfacing a web cam, front door speaker, and even the switch to buzz in the person requesting entrance. And with SIP, you can mix and match vendors in any way you choose.
 - SIP also delivers great flexibility with video technologies. You can integrate real-time video with your phone network without massive integration issues, giving you the long-distance video conferencing abilities of a Fortune 500 organization.

SIP is a great enabler of communication between disparate handsets and network switches. It just needs to be applied properly in order to maximize its flexibility while minimizing its feature limitations. Where you deploy it, and how you use it, will determine whether SIP enables more options, or less, within your voice environment.