SIP Gateway

Every office and small business needs a method of running multiple communication programs such as conference calling, video conferencing, media distribution, instant messaging, and account management software. To perform these tasks, servers need the help of a SIP gateway to bridge the gap between data streams and the Internet. SIP gateways are also essential in VoIP networks as they allow for multiple audio and video connections to take place at one time over the Internet. Moreover, using a SIP gateway is an affordable and efficient method of networking in and outside the office. In this article, we will discuss SIP gateways, how they work, and a number of popular SIP gateways on the market.

What are SIP Gateways

A SIP gateway is a device that connects to your Internet modem and relays data that it reads from your telephone communication system, computer software, and various devices such as microphones and webcams. A SIP gateway is required for an office to use advanced features such as conference calls, video conferences, phone line extensions, individual voicemail boxes, and other networking features that common VoIP programs provide. SIP gateways are often combined with other gateway devices such as VoIP gateways in order to maximize functionality without overcrowding your work area.

How Does It Work

SIP gateways work by collecting data from your audio and video devices as well as from your office telephone network and then configuring the information so that it can be processed by your modem. The information is then sent over the Internet where it is reconfigured into real data by either another SIP gateway or a telephone network. SIP gateways can exist as either physical devices or as software which make them incredibly popular and easy to find. Many people use SIP gateways without even knowing it. Programs like Windows Live Messenger, Skype, and Twinkle all use SIP sessions to simulate a telephone experience over the Internet.

Popular SIP Gateway Devices and Software

There are many different hardware and software solutions for telephony and networking applications that use SIP gateways and SIP software to simulate a
telephone experience over the Internet. The following are several examples of these devices and programs that are based on SIP technology.

**SIP 4FXS VoIP Gateway**
The SIP 4FXS VoIP Gateway is a networking webcam that is used to host live video conferences, take pictures, communicate with handheld devices such as cell phones and PDAs, monitor rooms when no one is around, and store data. The SIP 4FXS VoIP Gateway has a built-in web server to store the information that it processes and is capable of recording only when it registers motion in the room, which saves memory. The SIP 4FXS VoIP Gateway is rather expensive but it has everything that the user needs for networking.

**Twinkle**
Twinkle is an open source VoIP networking program that allows for users to host conference calls, video conferences, and instant messaging in one application. Twinkle uses SIP technology to facilitate a traditional phone call from your computer. Twinkle is able to work with any camera or microphone that is installed on the computer and allows you to manage your entire communication network from one client. Twinkle does not support external telephone connections but is a sturdy program for a small staff.

**Skype**
Sype is a user-friendly program that allows for all modes of telephony networking and VoIP calling. With Skype, a user can conduct instant messaging, video conferences, conference calls, individual calling, and calls to and from both landline and mobile telephones from one client. For a fee, Skype can also assign you a unique telephone number that will connect callers directly to your Skype account. Skype also allows you to forward calls to other numbers so that you can have a traditional telephone line without having to pay long distance or international calling charges. Likewise, this feature alone allows you to answer calls even when you are away from the office.

**Ekiga**
Ekiga is another open source application for SIP communication that allows you to send and receive instant messages, hear and be heard by the other person, and see each other through webcams all in one window. Ekiga can function in combination with other SIP devices or as a stand-alone program. Ekiga is designed to be flexible in the way that it interacts with your various devices. This means that
if you have another SIP device for a separate function such as managing a network of telephones, Ekiga can pick up the slack that the other program doesn't cover.

Source: http://www.tech-faq.com/sip-gateway.html