

VoIP strives to co-exist with alarm systems

When end users began shutting off their traditional phone service and replacing it with voice-over-IP service, it didn't take long before some people started having problems with their alarm systems, which typically are designed to share the customer's phone line. Four years or so later, the VoIP and alarm industries have had mixed results in finding solutions to these problems.

On the plus side, some of the nation's largest alarm installing companies have begun to endorse VoIP providers they say have taken the appropriate steps to address incompatibility issues. But those steps aren't sufficient to satisfy the National Burglar and Fire Alarm Association (NBFAA), which represents alarm installing companies and is pursuing legislation that would place additional requirements on all VoIP providers.

About 25 million alarm systems have been installed nationwide, according to Gordon Hope, general manager of Alarmnet, a unit of security manufacturer Honeywell. Comcast, which uses VoIP for the Digital Voice service that the company offers over its cable network infrastructure, estimates that 25% of Digital Voice customers have alarm systems. Potential incompatibilities between VoIP and alarm systems are fourfold.

One issue is that, unlike traditional phone service, which is powered through the central office, VoIP relies on premises-based power, which means that a customer could be without security during a power outage. Some VoIP providers, including some of the cable companies, provide battery backup.

Another issue is that most alarm systems need to be rewired in order to work properly when traditional phone service is shut off in favor of VoIP. Alarm systems use a specialized phone jack, known as an RJ31X, which must be installed near the point where voice service enters the residence. With traditional phone service, that point is typically in the basement or back of the house. But cable modem service typically originates near the living room or family room television, while DSL originates near an office computer. If the RJ31X jack is not repositioned, Hope explained, a burglar could defeat the alarm system by taking a phone off the hook. In that scenario, he said, "The alarm panel would see a busy circuit and couldn't get a dial tone."

HTG requires its approved VoIP providers (TWC) to rewire customers' homes as needed if they have alarm systems.

A third concern is that some VoIP services may not reliably transmit all alarm communication formats, which are used to send alarm signals to a central monitoring station and to remotely download changes to alarm system settings. Alarm industry communications formats are based on touch-tone, analog modem and other analog communication methods--and some of these may perform sporadically when used with VoIP, said Hope. He hastens to add that digital modem manufacturers have made some inroads in addressing this concern. But, he said, "It's still not what I would consider POTS line quality and you still may not be assured that the message will get there as cleanly as necessary."

The final concern about alarms and VoIP—sporadic network outages--also may pertain primarily to VOIP services that use the public Internet for transmission.

The NBFAA is still seeking a legislative solution, and John Chwat, NBFAA director of government relations, expects to get several provisions written into any telecom bill proposed this year. Some of these provisions—including a requirement that VoIP providers contact customers' alarm companies if VOIP is installed--simply codify what many providers already are already doing. But another requirement—to provide 24-hour battery backup—could add substantially to the cost of VoIP service. Today, even VoIP providers that offer battery backup typically only provide it for a few hours.

Before changing from your current analog phone provider please contact our office to see if your new VoIP carrier will work with your/our system.