Definity-G(x) Demystified:
By Walt Medak

Q: Over the past year or so we have migrated all of the phones in one of our buildings to a small VoIP system, leaving only a couple analog devices left on the EPN cabinet that served that building. It seems that about once a month something happens with the fiber between the main building and the remote building, causing an expansion interface alarm. This isn't a big deal because it usually clears up right away, but I am wondering if there may be a better way to handle those last couple devices. It seems to me that having an EPN cabinet for a couple phones is overkill.

A: It sure seems like overkill to me as well. I have a couple questions about this remote building. First, how far away is it from the main building? And second, it's obvious you have fiber between the buildings, but do you also have any copper cable? If the buildings are relatively close and you have copper cable, I think the solution could be very simple. You may be able to just run those devices from analog ports in your main building. Depending on the particular analog circuit packs you have in the Definity, it is capable of running an analog device as far as 20,000 ft. That's almost four miles. The exact distance depends on a number of factors including the size of the copper cable. Also, you would need to have some form of fuse protection on both ends of the tie cable. This would protect the equipment from voltage spikes caused by anything from electrical work to a lightning strike.

Q: We have a Definity R9.5 with quite a few IP phones working on it. This was all set up quite a while ago, and as I found out recently nobody had ever downloaded a newer phone firmware file to put on our TFTP server. I did that just the other day, and now I have a bunch of phones that aren't working. The display shows "Wrong set type". I tried going back to the previous firmware files, but that didn't help. What can I do?

A: This was an interesting one to figure out. It turns out all of the phones that aren't working are 4602's. The 4602 IP phones are not supported on the R9.5 software, so that makes sense to me. What confused me was the fact that they had been working at all. The sets in question were all programmed in the switch as 4606's. It must be that the old firmware files that were on the phones did not report what type of set it was, and the phone would work. The newer firmware must have changed something in the phone that does not get changed back when the old files are loaded. I don't know of any way to revert the phone back to a "factory default" configuration, so I'm afraid to say there isn't anything I can suggest other than to replace those phones with more 4606 sets.