

Avaya Demystified  
by Walt Medak

Q: We are having a problem with our IP phones, and I haven't been able to figure out what's causing it. It seems like once a month, all of the IP phones reboot themselves. There is a mixture of different set types, although most of them are either older 4612 or 4621 phones. I wasn't part of the original installation and setup of the system, but I have made sure that we have the latest firmware files loaded on the phones. There is a different department that handles our LAN equipment, and they assure me that there isn't anything wrong with their equipment. Any idea what could be going on?

A: The first thing that comes to mind is that the phones are reaching the end of their DHCP lease time. An expired lease can cause the IP phones to reboot. The first thing I would suggest that you do is talk to your LAN administrators about how they have the DHCP server configured and your "*46xxsettings.txt*" file. There are a couple settings in particular that may be coming in to play here. The first is DHCP option 51, which defines the DHCP lease time. Avaya recommends a lease time of six weeks or more. The second is an option in your "*46xxsettings.txt*" file called "*DHCPSTD*". If this option is enabled and set to "1", the IP phones will immediately stop using their assigned IP address when the lease timer expires. If for any reason the DHCP server is not available when this happens, the phone will be unusable until a new IP address is assigned. Avaya recommends that you set this option to "0", which tells the phone to continue using an expired IP address until a new one is received, or a conflict is detected with another device.

Q: We have a remote building on our campus that is about half a mile from our main building where the Definity is located. There are about six people in the building now. They are all using analog phones at this point because I can't make digital phones work over that distance. Of course, they would really like to have digital phones to have multiple call appearances, etc... I have a LAN connection to the building over some fiber that we installed. Is there any way I can get some digital phones working out there?

A: There is a device called an EXTender that I think would work great for you. Basically, they extend the digital ports of the Definity over a T-1 or IP connection so you can have phones across campus, or across town, act like they are plugged directly into the PBX. There are several different models from single port units designed for something like a home office, to a model that supports 24 phones. There is an 8-port model that looks like it would be the right size for your situation. The way the EXTender works is by connecting your digital station ports to the PBXgateway device that is located on-site with the Definity. From there, the traffic is converted to an IP connection in your case, and connects to the EXTender unit at the remote site. The phones (84xx, 64xx, etc...) connect to the EXTender, and function just like they were in your main building.