

Definity-G(x) Demystified:  
By Walt Medak

Q: We are in the process of moving one of our offices from one location to another. Because of some recent downsizing, I had a complete Definity system that I was able to have installed at the new location, and still keep the old location up until the move is complete in another month or so. The first people to move to the new location were our customer service and dispatch groups. Although we made some major changes to the call center programming, they are still planning on using a simple vector/announcement setup to route incoming calls to the right people. This is where we ran into problems. Since both systems were the same software version (G3V4), I had the translations and announcements from the original site copied to the new site and modified as necessary. I was able to record the new announcements without any problems. I can dial the extension number of the announcement, and it plays and sounds fine. However, when I call in using the VDN/vector, the announcement does not play. It is a very simple vector with just a "collect 1 digit after announcement xxxx" step followed by the corresponding "route to" steps. I'm stumped why I can play the announcement directly, but not through the vector.

A: This was a little confusing until I was able to see the hardware configuration of the new location. The problem is happening because the system that was installed in the new location has an older TN768 Tone Clock circuit pack. For comparison, the old location has a TN2182 Tone Clock. The TN768 does not have the type of tone detector ports that are required to use the "collect" step in the vector. The fix would be to either replace the TN768 with a TN2182, or install a TN744 Call Classifier. Either of those circuit packs would contain the correct type of tone detector ports to allow the "collect" step to function properly. My guess is the location that the new system came from was not using vectoring, and never needed the newer tone detector capabilities.

Q: We have a G3R V8 with a total of 7 EPN's. I know the number of incoming and outgoing calls is limited by the number of trunk lines, but how many people can pick up the phone and make an internal call at the same time?

A: That's one of those questions that seems like it should have an easy answer, but it's really not. If you are talking about the number of people that can all pick up the phone and be dialing a phone number at the exact same time, that number is limited by the number of tone receivers in the switch. If I counted correctly when I looked in your switch, that was somewhere around 90. If you are talking about the number of calls that can be in progress at a given time, that's a little more difficult to explain. That is limited by the amount of time slots that are available on the bus within the port network (PN). There are a total of 512 time slots per PN. However, that number is really 256 due to the bus being split for redundancy. Then there are a few time slots that are reserved for specific functions, leaving somewhere around 240 - 245 usable time slots per PN. Since you have a total of 8 port networks counting the PPN and the 7 EPN's, that adds up to a

little over 1900 time slots. The time slots don't carry over from PN to PN, so you can't have more calls active in one particular PN than the 240 - 245 number.

One thing this brings up is how important it is to plan how the trunking will be installed into the system. When a station attempts to make an outbound call, even if all of the outbound trunk members are in the same trunk group, it will attempt to use trunks that are within it's own PN first. So, if logistically possible, it is a good idea to split the trunks evenly across all of the PN's.

Sorry it's not a simple answer like 1397.