Definity-G(x) Demystified:
By Walt Medak

Q: Over the past seventeen years we have kept up with the turnover in System Administrators through upgrades from our original System75 to our current version of Definity G3iV4 with one exception; Automatic Route Selection. We have just found that our local calling has been routed through our long-distance vendor for several years. We were unaware of our need to maintain this in our system. Where do we go from here?

A: I received the above last week from one of our long-time clients. Over the years both they and we had shook our heads at the length (more than 40 pages plus Remote Home NPA's) of their ARS, and the complexity with which it had been implemented. It appeared to have been poorly designed when first installed, and that it had been modified by someone who had less than a complete understanding of their trunking. They stopped counting the added (and unnecessary) cost after they passed the $100,000.00 mark and enlisted our aid to rework the ARS completely. When we had finished rebuilding the ARS for them, it had been reduced to a couple of pages and RHNPA tables for those calling areas outside their local-calling area, and only the RHNPA tables ever need to be updated.

ARS is probably the most misunderstood feature in the Definity System, and the only one that requires constant updating by the System Administrator, a point of which most are unaware. As illustrated above, it can cost huge amounts of loss, especially when it's the hub of a 5-switch network as it was in that case. It's in that case (multi-switch network) that it becomes more than just a complex feature; it can become a feature that's VITAL to understand with complete clarity. With connections to other systems that are out of the local calling area of the hub system, it's common to modify the ARS to take advantage of calling to those areas through the network to avoid long-distance charges. Over time, with changes in both the System Administrators and local/long-distance vendors it's easy for mistakes to occur that don't appear obvious to the incoming System Administrator. Be unaware no longer! It is the responsibility of the System Administrator to keep the ARS properly updated and routing calls to the correct trunk group, and for the most part, they haven't understood that. It is the one thing in the whole system that can cost a company more than the savings of having an in-house administrator would gain. It's probably the most important job the System Administrator has, period.

To make sure it's routing properly, the best tool you have in your arsenal is the command "list ars route-chosen NXX-XXX-XXXX". It will return the route-pattern that the system will use to send calls to that number (area-code, prefix, etc.). By then looking at what trunk-group(s) listed in that route-pattern will be used, you can verify it's accuracy. If you are unsure, enlist the aid of your Definity vendor to verity it for you. You may think that this will then be the end of your problem or fear that you might have one. Not so! VERIFICATION! Let me say it again……. V E R I F I C A T I O N ! ! ! Check your local and long-distance bills regularly to make sure you're not routing calls the wrong way.

If you are not sure you have the knowledge to do all of this, at this point let me make a shameless pitch for our training facility where you can gain that knowledge in our Advanced System Administration class, or for either the OEM's training facility or their CD based ARS training. In any case, make SURE you can support your system's ARS!

P.S. Don't forget to evaluate your system's trunking…… any more than a dozen or so analog C.O. or combination of them and analog D.I.D. trunks warrants a look at replacing them with a T-1 (2-way DID) as that's about the threshold where economically the advantage is for the T-1.