

Definity-G(x) Demystified:
By Walt Medak

Q: I took over the responsibility for the Definity phone system at my company a few weeks ago. Since then, I've been trying to clean up some of the old programming and generally trying to make the system more secure. I managed to make it a bit too secure, as I just got a complaint from one of the departments that they can no longer forward their calls to their "on-call" cell phone. They usually have two or three people in their hunt group, and on those rare occasions when none of them are available, they have been call-forwarding their calls to a common cell phone. Now, when they try to activate the call-forward feature, they hear a wave-off tone as soon as they dial the leading 9. What did I do?

A: I applaud your efforts in trying to clean up the programming in your system. There is nothing more frustrating than fumbling through a bunch of old, outdated programming in a switch when you're trying to figure out a problem. Here is my guess as to what happened. The documentation isn't very clear on the subject, but a hunt group uses the settings in Class of Service (COS) 1. Unfortunately there isn't any way to change that. So if you changed COS 1 to restrict call-forward off net, that would explain why they couldn't forward calls to their cell phone. If your system is like most I've seen, I would guess the majority of the phones in the switch use COS 1. If you want to maintain the new security you just implemented, you would need to change all of the phones to another COS that retains the call-forward off net restriction. Then you could turn off the restriction in COS 1 to allow the hunt group to forward to the cell phone.

Q: I was just tasked with learning about our call accounting system. Supposedly, it was collecting data from all five of our Definity systems at one time, but I've been here for over a year and just found out about it myself. All of our systems are in the V9.5 to V11 range, software-wise. At this point, all I know is each of the locations has some kind of pollable data collection device that has an IP address that the call accounting system tries to contact. What I need to find out is how the data gets from the switches to each of those devices.

A: The first thing I always do when there is a report of call accounting/CDR problems is to run the command "status cdr-link". This will tell you the link status of both the primary and secondary CDR links. In your case, all five of your systems showed the state of the primary link as "up", which indicates the switch thinks the output destination is actually connected and working. Setting up CDR output in the Definity is fairly easy, but there are a few different screens to look at depending on how the output is configured. Since your system was working at one time, we can start by looking at the main screen that controls the CDR output. That would be either display, or change "system-parameters cdr".

The first things you would need to look at on this screen are the fields called "Primary Output Endpoint" and "Secondary Output Endpoint". The options for this field are the extension number of a data module (7400B, 8400B, etc...), eia, CDR1 or CDR2, or blank

if no output is requested. In your case, I noticed that two of your systems had “eia” as the primary output, and the other three had “CDR1”.

Let’s start with the ones set up for “eia”, as they are going to be the easiest ones to figure out. When the output is set for “eia”, the CDR data will be sent to an RS-232 serial port on the back of the switch labeled either “Data Communication Equipment”, or “DCE”. All that you would need to do is trace that cable from the back of the switch to your data collection device.

Your other switches were set up to send the output to “CDR1”, which indicates an IP endpoint. To track this one down, the first screen to look at would be either display, or change “ip-services”. One of the entries in the left-most column, labeled “Service Type”, should be “CDR1”. Follow that row across until you get to the column labeled “Remote Node”. Make a note of what is entered in that field.

Next, you would either display, or change “node-names ip”. Look for an entry in the left-most column that matches the name you just noted from the “ip-services” form.

Following that row across will tell you the IP address of the endpoint to which the Definity is sending the CDR data.

It may not be as easy to find an IP address as it is to trace a cable, but hopefully it will help a little bit. This is in no way a complete description of how to set up the CDR feature on the Definity. If you have any questions, please feel free to give me a call.