



Tech Info Library

SNA•ps Gateway Config. To A Channel Attached 3174 (3/94)

Article Created: 24 March 1994

TOPIC -----

I am setting up a SNA•ps gateway on Token Ring at a user site. According to the user, the 3174 is connected by subchannel directly to the host and a Macintosh IIX (gateway computer) is on Token Ring connected to the 3174. The user gave me the address for the 3174. I went into SNA•ps Manager, set up a Token Ring config, put in the address: 400025400003, keeping display LU's as 1, and Printer LU's as 0, left the XID blank (what bother's me is on page 20 of the gateway manual it says you must enter the Exchange ID), and left the default Token Ring card address. I started the gateway, setup connection and tried to connect, and I immediately get a 510 comm error. I have two questions so I can be more knowledgeable with them.

- 1) Is it okay to leave the default Token Ring card address? The user says on his PC's he doesn't have to change it. If yes, where does the user get this ID, from Question 940 on the 3174 configuration?
- 2) Is the XID required? Again, if yes, where do I point the user to get this?

DISCUSSION -----

- 1) Is it okay to leave the default Token Ring card address? Generally this is not the correct thing to do.

The user says on his PC's he doesn't have to change it. Perhaps they are getting the client connection to a NetBios gateway mixed up with being the gateway. A NetBios connection to a 3270 IBM downstream gateway would use the Burned-in address. Kind of like using the burned-in Macintosh Ethernet address when running EtherTalk.

If yes, where does the user get this ID, from Question 940 on the 3174 configuration? YES.

- 2) Is the XID required? Again, if yes, where do I point the user to get this? In this connection, a Downstream PU off a 3174, an XID is NOT used in the configuration. The SNA•ps engineers wrote the configurator for Token Ring requiring an XID always. Just enter 000-00000 and let it be. It is never sent to the host or the 3174.

It could be the user is not following IBM's suggestions about how to customize the 3174. IBM suggests using locally administered Token Ring addresses so you can change the physical Token Ring hardware, and not have to alter the customization of the 3174 each time. The user may have entered the "burned-in" addresses of specific cards into the 3174 customization, which is very time consuming.

This is how the connections work:

In the 3174, Question 900 is the Token Ring address of the 3174 (the one it is known as on the Ring). This is the Address you put in the SNA•ps config as the "gateway" Token Ring address.

A channel attached 3174 has a channel address and several sub-channel addresses.

The first subchannel address is associated with the Coax ports on the 3174. The 2nd through 5th (however many) subchannel addresses are associated with downstream PUs, which are "3174" like controllers such as a SNA•ps gateway. The downstream controller is not located in the channel attached 3174 but on the Token Ring. The 3174 offers the service of doing a Link layer remapping of the Subchannel address to the proper Token Ring address. That is the function of question 940.

```
Subchannel 560 ----> TR 4000 0000 4444 0000
Subchannel 561 ----> TR 3E89 EEEE 8990 C667
And so on.
```

The host has a configuration in NCP for LU (displays and printers) associated with these subchannel addresses. When it "polls" the subchannel address, the 3174, passes the SNA request out it's Token Ring port to the Token Ring address shown in Question 940. The SNA•ps downstream PU gets connected by using a proper and configured Token Ring address from question 940.

If you do not use one of these configured addresses, you get a Comm 510, which means, "I passed my address to the 3174 and it did not match any of the values found in question 940, so I could not become an active downstream PU."

You have to use one of the configured addresses. Try to verify which PC is using one of the configured addresses. Make sure it is powered down, and use it's Token Ring address value (also shown in question 940) in the Macintosh Token Ring control Panel. Remind the user you are NOT changing the 3174, you are configuring the Macintosh to match up with their 3174 customization.

Support Information Services
Copyright 1994, Apple Computer, Inc.

Keywords: knts

=====

This information is from the Apple Technical Information Library.

19960215 11:05:19.00

Tech Info Library Article Number: 15056