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SNA•ps 2.0 Gateway: Memory Config On NuBus Cards (6/93)

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TOPIC -----

I'd like to calculate how much RAM I need on a Serial NB Card or Token Ring 4/16 NB card running the new SNA•ps 2.0 gateway and System 7.1 with NSI 1.3.2.

EFFORTS TO RESOLVE PROBLEM: I've followed the examples found in the Tech Info Library under SNA•ps 1.1: Memory Configuration Running on Token Ring Card. Two issues arise.

First, does Gateway version 2.0 use more memory than 1.1? How about NSI 1.3.2? When I try to start a gateway (in this case on a Serial card without extra ram) I receive a message stating that only 38000 bytes are available instead of 54K as stated in the Tech Info article.

Second, can I receive a breakdown of RAM usage on the cards (Token Ring 4/16 and Serial) for the other things that are on there so that I can see the entire memory usage picture? This article and another like it only describe the memory usage of the Gateway.

DISCUSSION -----

Our rule of thumb is, a Serial or Token Ring card running SNA•ps gateways need 1MB. If multiple host connections are used (for example more than one host AS/400 and 3270 mainframe) at the same time than 2.5MB is suggested.

I checked and SNA•ps Engineering believes that the size of the Gateway code has not changed greatly (+3K), and the size of A/ROSE 1.2 is still 68K like A/ROSE 1.1.X. The TokenTalk Phase 2 version 2.5 is about 2K larger than the 2.4.X versions. The total RAM hit on the calculations in the posted article is about 5K. I have seen the Serial card report less than 54K of RAM available when large gateways were loaded onto card of 0.5MB, so your report of 38K now is valid.

Our advice is to increase Serial and Token Ring cards to 1MB for all gateways over eight sessions. If the Token Ring card also used TokenTalk,

then you MUST have 1MB. The four chips needed to upgrade the RAM by 0.5MB (to 1MB) can be purchased from Marshall's Electronics using their 800 number.

The RAM calculations in the article (based on gateway resources) are still accurate. They are contained in the Ports O' Call '92 training.

You asked about RAM usage on the cards for other things. The Token Ring card comes up mostly because of the common mix of SNA and TokenTalk. That combo always needs 1MB. The TokenTalk software needs about 54K Bytes on the card. The TCP/IP Token Ring extension has been quoted to me as about 50K bytes as well but getting solid data has been difficult. That is the entire product mix on the Token Ring card.

The Serial card has been touted as supporting SNA•ps and X.25 at the same time. If you tried to place SNA and X.25 on the Serial card, you would have to up the RAM to 1MB and maybe 2MB depending on the number of sessions in both protocols. We would not advise a customer to do this since the SNA code stretches the performance of the 68000 on the card already. That is all that is currently support on the Serial card.
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