



# Tech Info Library

## ABS Tech Note: SNA•ps11 SNA•ps Q&A (4/93)

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TOPIC -----

This technical note lists the most frequently asked questions regarding SNA•ps. The questions are sorted among three categories: SNA•ps 3270, 3287 and 3270 API, Installation and Gateway.

DISCUSSION -----

SNA•ps 3270, 3287, and 3270 API  
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SNA•ps 3287 Foreground/Background Printing Modes

Q: Why does SNA•ps 3287 print in the foreground on the LaserWriter LS (and other direct-connect printers that have background capabilities, such as the StyleWriter, HP PaintJet, and HP Deskwriter/C)?

A: This limitation arises because there isn't a way to determine whether background printing is supported by a given printer driver. Also, SNA•ps 3287 needs to prevent the user from doing anything while printing to a direct-connect ImageWriter. The combination of these two factors forces SNA•ps 3287 to handle the situation as you describe. See Technical Note: "SNA•ps05 3287 Tips," for detailed information and a possible workaround.

SNA•ps 3287 Memory Requirements

Q: I get warnings about low memory while running SNA•ps 3287.

A: Increase SNA•ps 3287's memory size using the Finder's Get Info command. SNA•ps 3287 has a default partition of 450K. Each additional page of unprinted accumulated data requires one half K of RAM, therefore, to hold 200 pages of unprinted accumulated data, you need 550K. If you run out of memory by accumulating too many unprinted pages, SNA•ps 3287 will warn you and stop receiving data from the host until some memory is freed by pages being printed and deleted. See Technical Note: "SNA•ps05 3287 Tips," for detailed information about SNA•ps 3287 memory usage.

Note: SNA•ps 3287 v1.1.1 changed the default timeout setting to include a 200 page timeout limit. At the default memory size of 512K, SNA•ps 3287 can guarantee having enough memory to accumulate and then print 200 pages without running out of memory. The new default setting simply guarantees that SNA•ps 3287 can be installed and used without fine-tuning the timeout settings even if print jobs arrive

continuously.

Does SNA•ps 3270 use the Apple 3270 API?

Q: Does Apple's 3270 API support both SNA•ps 3270 GC and SNA•ps 3270 direct?

A: Apple's 3270 API is a programming interface which is used to give host access via a variety of connection methods (both Apple and third party). SNA•ps 3270 GC and SNA•ps 3270 are separate products which currently are not written to the 3270 API interface.

Apple 3270 API - What files are necessary?

Q: Which files are necessary to run applications written to the Apple 3270 API?

A: The following files must be located on the 3270 API client machine in order to allow the client to access SNA•ps Gateways:

ADSP 1.5.1 (only required with system 6.0.x)

3270 Prep 2.0.1

SNA•ps Access 1.1.1

Apple's 3270 API implementation is written specifically to support the SNA•ps Gateway. The necessary file for 3270 API connectivity via SNA•ps is SNA•ps Access/3270. This file contains Apple's implementation of the API. As long as these files are on a client machine, applications written to the API will work properly via a SNA•ps Gateway.

SNA•ps Installation

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SNA•ps v1.1.1 and v1.0 Compatibility

Q: Can I freely mix v1.0 and v1.1 clients and gateways?

A: The SNA•ps 1.1.1 and 1.0 Gateway packages are not compatible - always use a SNA•ps Access and a SNA•ps Gateway of the same version. Applications such as SNA•ps 3270 will run over either version of SNA•ps Access (SNA•ps 3287 requires SNA•ps Access v1.1.1 and a v1.1.1 Gateway). See tech note "SNA•ps01 Version Compatibility" for more details.

Note: SNA•ps versions 1.1 and 1.1.1 are completely compatible.

SNA•ps - System Software requirements

Q: What version of the system software is required for a SNA•ps Gateway?

A: SNA•ps 1.1.1 uses A/Rose 1.1.8, which will not run on system 6.0.5. You MUST upgrade to system 6.0.7, 6.0.8, or 7.0.x in order to run the 1.1.1 Gateway.

SNA•ps Gateway won't initialize because machine isn't named

Q: I loaded a SNA•ps Gateway on a machine on which System 7.0 was recently installed, and the SNA•ps Gateway won't initialize because I haven't named my machine.

A: If you are using System 7.0, SNA•ps requires that the owner and name of the machine in the sharing setup control panel must be provided. It is advisable to set this before installing the SNA•ps Gateway.

System Files required for SNA•ps Client Access

Q: We're upgrading our SNA•ps servers and clients from version 1.0 to 1.1.1. We use the Installer application to upgrade the Gateways, and we'd like to use our own automated upgrade utility to upgrade the client

machines. Can we distribute only the SNA•ps Access without the other system files and without using the Installer? If we need to distribute the other system files, which versions do we need for System 6.0.5? Are the system files distributed with the SNA•ps software compatible with 6.0.5?

A: The Installer isn't required for upgrading your client machines. The only system files required on client machines are ADSP and SNA•ps Access. You'll need ADSP 1.5.1 for System 6.0.x machines (ADSP hasn't changed since SNA•ps 1.0.1 was released). However, Apple doesn't support System 6.0.5 when using SNA•ps 1.1.1. System 6.0.7 is the earliest system software version tested for compatibility with SNA•ps 1.1.1.

What does the SNA•ps install do?

Q: When running the Installer to install a SNA•ps 1.1.1 workstation, does the SNA•ps software only copy files, or does it install resources in the system?

A: The SNA•ps installer software only copies files.

SNA•ps - System 7.0 memory requirements

Q: I'm having memory problems when running SNA•ps client software on an Macintosh LC with 2 Meg of memory and System 7.0

A: Please see the release notes for information regarding running in this configuration. Generally, 2.5 Meg of RAM is recommended when running SNA•ps with System 7.0.

SNA•ps Gateway

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SNA•ps Independent/Dependent LU Support

Q: The SNA•ps Gateway will not let us define a mix of dependent and independent LUs. We need to support parallel conversations over LU 6.2 and also provide 3270 sessions. Is there any way to do this?

A: The limitation is that the gateway does not support dependent and independent LUs on the same line/partner (PU). There are several workarounds for this. If you are using SDLC, you can define a multi-drop configuration, (see the sample multi-drop config). This will allow you to run both Dep and Indep on the same SDLC line. If you are using Token Ring, then you will need to define two lines and two partners in a single configuration, the partners should have different SAP addresses to the same TIC. Then you define Dep and Indep LUs separately on the two line/partner combinations (one partner is type 2.1 the other is type 5). Alternatively, you can have two partners with different XIDs to the same TIC (one PU Dep the other Indep). Either approach will provide the functionality you need.

SNA•ps - Token Ring 4/16 Support

Q: Version 1.0.1 of the SNA•ps Gateway will not run on an Apple 4/16 TokenTalk NB Card. (We can make it work on Apple's previous Token Ring card but not on the current product). Does version 1.1.1 fix this? If so, how fast can we get version 1.1.1?

A: Yes, version 1.1.1 is needed. This is currently shipping. You should send in for a free upgrade. All customers who purchased MacDFT or SNA•ps version 1.0 products are eligible for a free upgrade to the respective SNA•ps version 1.1.1. product. To receive a free SNA•ps 3270 version

1.1.1, SNA•ps 3270 GC, SNA•ps Gateway/8, SNA•ps Gateway/32 or SNA•ps Gateway/64 upgrade kit, send (1) proof-of-purchase such as an original SNA•ps 1.0 disk, MacDFT disk, or invoice and (2) your name, company name, address (no P.O. boxes, please), and telephone number to

Apple Computer, Inc.  
Promotional Support  
Attention SNA•ps 1.1.1 Upgrade  
P.O. Box 4055  
Cupertino, CA 95015

Please allow 3 to 5 weeks for processing and delivery. For non-U.S. customers allow an additional 3 to 5 weeks.

#### Defining Transaction Program Names

Q: We can't find a way to use dynamically defined Transaction Program Names (TPNs). They must be pre-configured in the Gateway. What's the trick?

A: Yes, TP names are defined statically. However, you can use the wildcard "\*" to match any TP name.

#### Defining LU Names - AS/400 Connection

Q: We have a problem with LU 6.2 sessions, using our Apple 4/16 Token Ring adapter card with OS/400 2.1.1 on the AS/400. The Token ring line, Controller, and Device all show status of ACTIVE. The virtual controller QPACTL01 has been created and is showing status of ACTIVE. The virtual devices for this controller are showing status of VARY ON PENDING. We're getting an SNA negative response with sense code of 0806, which indicates a request reject, resource unknown. Why we are having problems with this mode?

A: In the SNA•ps configuration under Remote LU 6.2's Characteristics you want the "Network LU Name" to be set to DVIAS400. In the trace you sent us the AS/400 is sending that as its local name and the SNA•ps Gateway is rejecting it because it doesn't know about the name DVIAS400. The name field in the Remote LUs 6.2 is for local use by SNA•ps transaction programs, and is not the network name field used to BIND with the AS/400. The Network LU Name is the name you should be using.

#### How Do Modes Get Activated?

Q: We're experiencing difficulties with SNA•ps modes getting disabled when we restart it from SNA•Admin. Our configuration file has the "Automatically activate" checkbox set for every mode. Most modes are activated when our gateway starts up, but some are not. When we try to use connections with disabled modes, we get communications errors. Should the modes be enabled automatically when the gateway restarts? Can some other event cause them to be disabled? If external events can cause a mode to be disabled, is there any way for us to tell when this happens?

A: There are a number of reasons for sessions not coming active. Please check that you have selected the "minimum prebound" setting if you wish sessions to automatically come active. If this is selected, then you'll need to check the line trace to determine why the binds are being rejected. There are numerous reasons for this, such as configuration mismatch or resource shortages. The sense code information associated with the bind rejects will give a clue to the cause. These types of messages will be logged in the SNA•ps log facility. All binds and

session establishment problems are routinely logged. But again, a line trace may be necessary for more exact information regarding the reasons for the failure. See Tech Note "SNA•ps04 Bullets" for more information.

#### Support for Third-Party Token Ring Cards

Q: I have a question about a configuration for using the SNA•ps Gateway over a token ring connection. If I have several Macintosh systems with DCA (formerly Avatar) 4/16 token ring cards in them (and that's their only connection to each other; no LocalTalk connections), can I put one Apple TokenRing card in one of the Macintosh systems and put the SNA•ps Gateway software on that Mac and use that one as the gateway for all the other Macs? In other words, can the Macs that contain only Avatar token ring cards somehow communicate through the one Macintosh that has the Apple token ring card and the SNA•ps Gateway?

A: This will work fine. If you don't have an DCA (formerly Avatar) card in the machine running the SNA•ps gateway, you'll still need to run TokenTalk on that machine. For the Apple Token Ring 4/16 card use TokenTalk 2.4; for the TokenTalk 512K board use TokenTalk 2.2

#### Problems Starting Gateways

Q: When we try to start our SNA•ps Gateway, we get a message similar to the following: "Couldn't open gateway connection to server. Please make sure gateway machine is running." Since this is the gateway machine, I'm pretty sure it is running. Any suggestions or ideas?

A: This message indicates some problem with ADSP or A/ROSE. Make sure the card is secure in the slot, or try moving the card to another slot or replacing the card. You can use nprm to diagnose the problem. Nprm is a utility which allows status messages from the gateway, running on the NuBus card to be displayed on the Macintosh screen. You can obtain Nprm through the normal Apple Support Channels.

#### SNA•ps Connection to an AS/400 - Autoconfigure Option

Q: Is there some setting that would hinder the AS/400 from autoconfiguring devices and modes? Even though the autoconfig parameter is set to \*YES, it doesn't always create devices and modes, particularly when the SNA•ps Gateway is set to host mode.

A: You need to two autoconfig parameters: With WRKSYSVAL, there's a parameter QAUTOCFG that says whether to autoconfigure devices (default=yes). In the line description, there's a parameter that says whether to autoconfigure controllers (default=no).

#### SNASVCMG Mode - What is it?

Q: What is mode SNASVCMG?

A: SNASVCMG stands for SNA Service Manager, and is used by SNA•ps for managing parallel sessions.

#### Article Change History:

26 July 1993 - Company title changed from Avatar to DCA (Digital Communication Associates).

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