ABS Tech Note: SNA•ps06 Modem Configurations (10/92)

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TOPIC ---

This technical note discusses configuring modems for use with SNA•ps Gateways.

DISCUSSION ---

Introduction

SNA•ps works with synchronous modems that support either the V25bis or SADL autodial protocols. The Codex 2264, which is a 9600 baud synchronous modem, supports V25bis autodial protocols and has been tested and found to work fine. Other modems, primarily used for asynchronous applications, can be used synchronously if configured correctly. This technical note describes setting up the Hayes SmartModem 9600, Digicom DSI 9624L, and Codex 2264 for use with SNA•ps Gateways.

Configuring Modems for use with SNA•ps Gateways

The Hayes SmartModem 9600 and Digicom DSI 9624L modems can be configured for synchronous serial connections. The procedure is to set the modem to work synchronously and automatically dial a pre-entered phone number when SNA•ps line and partner are both activated.

The following describes how to set up these modems for use with SNA•ps:

- Attach a serial cable to the Modem and connect it to the serial port on the Macintosh.
- Install any terminal emulation program on the Macintosh. (ex. MacTerminal)
- Start the terminal emulation program on the Macintosh. Connect to a terminal session.
- Power on the Hayes Modem.
- While connecting asynchronously (9600 baud, 8 bits, no parity), type the following commands:

  (The information below is for the DSI 9624LE, with notes on where the Hayes differs.)

  AT&F - reset to factory settings
  AT*O (DSI) - show current settings

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    AT&S  (DSI) -  show dialing directory  (Hayes: AT&V shows both current
                   settings and dialing directory)
    AT&Zphone#  -  store phone number in first location (Hayes: AT&Z0=phone
                   number)
    AT&M2       -  on DTR high, auto dial phone number stored in first
                   location  and enter synchronous mode
    AT&R1       -  CTS goes on when the modem is ready to receive
    AT&B1       -  modem turns on DSR when DTR from attached DCE goes on.
    AT&W        -  save configuration
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- Remove the Serial cable from the Hayes Modem
- Connect the modem to the Apple Serial NB hydra cable.

The line description in the SNA•ps configuration must specify the port the cable is attached to. The SNA•ps Config line settings should be half duplex, NRZ, manual dial, and switched. The phone number in the partner description is ignored, as the phone number stored in the modem is dialed.

When the SNA•ps Gateway is started and the line and partner are activated (either manually or automatically), the modem will dial the stored number.

Using the SNA•ps Gateway Auto-dial Feature

To configure the Codex 2264 modem for auto-dial usage with SNA•ps Gateways, set up the modem as follows:

For answer:

- Choose option set 2
- Change Modify Terminal: DTR: to high

For dialout:

- Make sure that all dip switches in the back of the modem are up
- Choose option set 3
- Modify V.25 BIS:
  - Char set = ASCII -> EBCDIC
  - ACU idle = Char -> Mark
- AUXILIARY, AUX DIALING:
  - tone (vs. pulse)

The line description in your SNA•ps configuration should be half duplex, NRZ, V25bis dialer, and switched. The phone number in the SNA•ps Config partner description will be dialed when the gateway is started and the SNA•ps line and partner are activated.

Configuring the Apple Serial NB Card for use with SNA•ps

The Serial NB card is shipped with ports 1A and 1B configured for V35/RS422 signals. If you plan to use these ports in RS232 mode, remove the two resistor packs in the upper right-hand corner of the board. This is described in the Apple Serial NB Card Installation Guide. SNA•ps can run these ports at 56 K BPS line speeds since the data link control (DLC) task

implements DMA on these ports. Channels 2A and 2B, are limited to a maximum of 9600 Baud. All four SDLC ports can be in use simultaneously.

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