

SNE2040 Utilities and SNMP Management

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Overview

The SNE2040-P (Provider) and SNE2040-S (Subscriber) units support SNMP management with firmware version 6.0.0 or greater. Paradyne also provides command line utilities that can be used to configure and upgrade the SNE2040 without SNMP.

Command Line Utilities

Three command line utilities are available on the Paradyne website. (Click on Support, then Tools.) They are:

- **pdynips.exe** – Sets the IP address, subnet mask, and default gateway for an SNE2040.
- **pdynncl.exe** – Clears NVRAM (Non-Volatile Random Access Memory), returning the SNE2040 to factory default settings.
- **pdynidl.exe** – Replaces firmware on the SNE2040.

The utilities do not have to be used with the SNE2040, but they are available for use if an SNMP management tool is not available.

The following are requirements for using the utilities:

- Your PC must be plugged directly to the Ethernet port of the SNE2040.
- Your PC must be running Windows 2000 or Windows XP.

To run the utilities:

► Procedure

1. Close all other programs that are running on your PC.
2. Open a Command Prompt window:
 - Click on Start, then Run.
 - Type **cmd** in the Open: line and click on OK. A command prompt window opens.
3. Type a command name and parameters and press Enter.

pdynips

Format:

pdynips.exe <IP Address> <Mask> <Gateway>

Example:

pdynips.exe 10.11.22.100 255.255.255.0 10.11.22.1

The program sets the IP Address, subnet mask, and the default gateway of the SNE2040. The SNE2040 will acknowledge the change if it is successful.

pdynncl

Format:

pdynncl.exe nvram clear

Example:

pdynncl.exe nvram clear

This program clears NVRAM on the SNE2040. The SNE2040 will be set back to the factory defaults after this program runs.

pdynidl

Format:

pdynidl.exe <Firmware Pathname>

Example:

pdynidl.exe c:\firmware\6_00_0S.bin

This program loads the specified firmware file.

SNMP Management

Once you have IP access to the SNE2040 units you can use SNMP to manage the units. You must download the latest Paradyne MIBs to your SNMP platform before you can fully access the SNE2040 units. There are specific MIBs written for the SNE2040 that need to be compiled into your browser.

To set your IP address, subnet mask, default gateway, and in-band management, go to the following objects:

Object ID	Name	Purpose
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.2.0	mumCfglpAddress	Sets the IP address.
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.3.0	mumCfgSubnetmask	Sets the subnet mask.
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.4.0	mumCfgDefaultGateway	Sets the default gateway.
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.5.0	mumCfglbandMgmt	Enables in-band emangement. If this setting is enabled, you will be able to access the SNE2040 through both the Ethernet port and the SDSL ports.
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.6.0	mumCfglbandMGMTVlanID	Sets a Management VLAN.
1.3.6.1.4.1.8059.1.1.1.1.1.2.1.8.0	mumCfgCommitChange	Commits all of the settings above. Caution: Make sure that all of the settings entered are correct before committing. If you commit the wrong data you may have to clear NVRAM to regain access to the SNE2040.

Note: When you change the IP address of the SNE2040 you may need to change your PC's address in order to regain access to the SNE2040.

Creating a Static ARP Table Entry for the SNE2040-P

To gain initial connectivity to the SNE2040, use the pdynips utility or SNMP to set the IP address, subnet mask, and default gateway. Once the default IP address has been changed, the units will respond to ARP requests.

There are differences in the operation of the two SNE2040 units. The SNE2040-P (Provider) unit has a default IP Address of 192.168.254.250 which can only be accessed through the Ethernet port by default. The SNE2040's management interface will not respond to broadcast packets so it necessary to add a static ARP table entry to your PC before you can access the device. To do this you will need the MAC address of the SNE2040 unit (which is on the label on the bottom of the unit) and the default IP address.

To set a static ARP table entry in your PC:

► Procedure

1. Configure your PC to be in the same subnet as the SNE2040: In the Internet Protocol (TCP/IP) Properties dialog box for your Ethernet adapter, click in the radio button labeled "Use the following IP address" and type the address and subnet mask.

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2. Open a command prompt window (cmd.exe).
 3. Type:

```
ARP -s 192.168.254.250 xx-xx-xx-xx-xx-xx
```

where the IP address is the default address of the SNE2040-P and xx-xx-xx-xx-xx-xx is the MAC address you obtained from the label on the bottom of the unit. Note: If you are working on more than one SNE2040, you must to change the static ARP table entry before you can contact each unit.

4. Connect your PC to the Ethernet port of the SNE2040-P.

You should now be able to ping the SNE2040.

Creating a Static ARP Table Entry for the SNE2040-S

The SNE2040-S (Subscriber unit) is designed to be managed through the SDSL port by default. To access the Subscriber unit, you must do the following:

1. Establish an SDSL link to an SNE2040-P (Provider) unit or a SIM2000-24 access card. Connect your PC to the Ethernet network where your SIM2000-24 or SNE2040-P unit is located.
2. Open a command prompt window and build a static ARP table entry as described above. Note: The SNE2040-S (Subscriber unit) uses a default IP address of 192.168.254.251. Type:

```
ARP -s 192.168.254.251 xx-xx-xx-xx-xx-xx
```

where the IP address is the default address of the SNE2040-S and xx-xx-xx-xx-xx-xx is the MAC address you obtained from the label on the bottom of the unit.

You should now be able to ping the SNE2040-S through the SDSL link. If not, make sure that you have a good SDSL link and that your PC is in the same subnet as the SNE2040-S (192.168.254.xxx).



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