

Sniffer[®] Portable

VERSION 4.8



Know the Network[™]

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Preface

Sniffer® Portable is a powerful network analysis tool that enables you to monitor and troubleshoot your network. This document describes the system requirements and installation procedures for Sniffer Portable, including:

- *Installing Sniffer Portable on page 1*
- *Authorizing Sniffer Portable on page 13*
- *Installing Adapters and Sniffer Enhanced Drivers on page 19*
- *Installing Madge Adapters and Enhanced Drivers on page 29*

Audience

This guide is designed and produced for Network Administrators, Network Engineers, and Information Technology Managers who are responsible for monitoring, capturing, and analyzing data from their corporate networks.

In addition, this guide will help other networking professionals with installation, connection, and configuration tasks required to establish connection to a Network General™ product on your network.

Getting More Information

Source	Contents
Sniffer Portable Installation Guide	Provides the system requirements and installation instructions for Sniffer Portable and Sniffer Portable enhanced drivers.
Sniffer Portable User's Guide	Provides a comprehensive overview of all Sniffer Portable features.
Sniffer Portable Expert Alarms Reference Guide	Describes each of the alarms generated by Sniffer Portable's Expert analyzer, along with their related thresholds.
Switch Expert Guide	Describes how to connect and configure Sniffer Portable to use Switch Expert features.

Source	Contents
Sniffer Mobile Operations Guide	Provides information specific to configuring, and operating Sniffer Mobile. Sniffer Mobile provides decodes and Expert Analysis for Mobile IP protocols.
Sniffer Reporter	Describes how to install and configure Sniffer Reporter to generate a wide variety of reports based on data collected by Sniffer network analysis and monitoring products.
Sniffer Tool Collection's Sniffer Focused Analysis Guide	Describes how to use Sniffer Focused Analysis to leverage existing Sniffer trace files for additional analysis and troubleshooting.
Sniffer Tool Collection's Sniffer Capture Format Converter	Describes how to use Sniffer Capture Format Converter to convert existing third-party trace files to .cap format.
Sniffer Wireless Guide	Describes how to install, configure, and operate Sniffer Portable with a supported wireless network adapter.
Sniffer Voice Operations Guide	Provides information specific to configuring and operating Sniffer Voice. Sniffer Voice provides decodes and Expert analysis for Voice over IP (VoIP) protocols.
ATM Adapter Reference Guide	Describes how to install, connect, and configure Sniffer Portable when using ATM hardware. Describes ATM interface pods.
ATMbook Reference Guide	Describes how to install, connect, and configure the ATMbook to capture and generate packets using Sniffer Portable.
Full Duplex 10/100 Ethernet Reference Guide	Describes how to install, connect, and configure Sniffer Portable when using the Full Duplex Ethernet PCI adapter.
Upgrading the Full Duplex 10/100 Ethernet PCI Adapter Guide	Describes how to use the FlashUpd utility provided with Sniffer Portable to upgrade the FPGA firmware used on the FDX 10/100 Ethernet PCI adapter.
Gigabit Ethernet Reference Guide	Describes how to install, connect, and configure Sniffer Portable when using the Gigabit Ethernet PCI adapter.
WAN Adapter Cards Reference Guide	Describes how to install, connect, and configure Sniffer Portable when using the LM2000 or HSSI adapter.
Snifferbook Ultra Reference Guide	Describes how to install and configure the Snifferbook Ultra unit and optional Phys.

Source	Contents
Snifferbook Reference Guide	Describes how to install, connect, and configure Sniffer Portable when using the Snifferbook.
Help	Product information that is accessed from within the application. • The Help system provides high-level and detailed information. Access from either the Help menu option or the Help button in the application. • Context-sensitive (also called What's <i>This?</i>) Help provides brief descriptions of the selections in the application. Access by right-clicking an option, pressing the [F1] control key, or dragging the question icon to an option.
Release Notes	<i>README file.</i> Product information, system requirements, resolved issues, any known issues, and last-minute additions or changes to the product or its documentation.

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The department's hours of operation are 7:00 AM to 7:00 PM Central time, Monday through Friday.

International phone numbers:

<http://www.networkgeneral.com/ContactUs.aspx>

Latin America: +55 (11) 5180-6643

Europe: +44 (0) 1753 217500

Australia/New Zealand: +61 (2) 9761 4200

Asia: +65 6222 7555

Japan: +81 3-5219-1221

Mail:

Network General Corporation (North America)

Customer Service Department

Mail Stop 2S362

5000 Headquarters Drive

Plano, TX 75024

USA

**Customer Service
International
Address**

Network General International BV (EMEA)
Customer Service Department
PO Box 58326
1040 HH Amsterdam
The Netherlands

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Installing Sniffer Portable

1

Overview

This chapter provides the system requirements, installation instructions, and upgrade instructions for the Sniffer Portable software, and introduces the Network General supported adapters and enhanced drivers.

- *System Requirements on page 1*
- *Before Installing Sniffer Portable on page 3*
- *Uninstalling Previous Versions of Sniffer Portable on page 4*
- *Installing Sniffer Portable on page 5*
- *Supported Adapters and Sniffer Enhanced Drivers on page 11*

System Requirements

Table 1-1 lists the minimum recommended hardware and third-party software requirements to run Sniffer Portable.

Table 1-1. Sniffer Portable System Requirements

Item	Requirement
Computer	Pentium IV running at 733 MHz or better (All Supported Operating Systems) Pentium III running at 600 MHz or better (All Supported Operating Systems) 256 MB RAM Minimum System Memory (All Supported Operating Systems) 150 MB or more of free hard drive space (All Supported Operating Systems) CD-ROM Drive
Operating System	Microsoft Windows XP Professional Edition with SP 2 Microsoft Windows NT 4.0 (Server & Workstation) with SP 6a and Security Rollup Package (SRP) Microsoft Windows 2000 (Professional & Advanced Server) w/ SP 4
Monitor	VGA color monitor with 800x600 resolution (with 256 color support or updated VGA driver)
Adapter Card	Network adapter card configured with an IP address and connected to the network (see <i>Supported Adapters and Sniffer Enhanced Drivers on page 11</i>).

Table 1-1. Sniffer Portable System Requirements

Item	Requirement
Browser with Internet Access	Microsoft Internet Explorer 6.0 SP 1
Media Player	Media Player: • Version 6.4.07.1112 on Windows NT • Version 7.00.00.1954 on Windows 2000 • Version 8.00.00.4487 on Windows XP
Additional Software	Crystal Reports 8.5

Power Considerations for Sniffer Portable Laptops

Most laptop computers include power configuration options that let you specify whether the computer should be allowed to go into a *standby* or *hibernate* mode after a specified period of inactivity. **For computers actively running Sniffer Portable, these options should always be disabled to preserve stable system performance!**

For example, MS-Windows 2000 and XP laptop computers include a Power Options Properties control panel. The Power Options Properties control panel is accessed by starting the Display control panel (**Start > Settings > Control Panel > Display**), clicking on the **Screen Saver** tab and then clicking the **Power** button. In this example, the following settings should be made for active Sniffer Portable operations:

- Power Schemes Tab
 - **Turn off hard disks = Never**
 - **System standby = Never**
- Hibernate Tab
 - **Enable hibernate support = Disabled**

NOTE: Some laptop vendors include their own proprietary software to perform power configuration tasks. In these cases, you may need to make similar changes in the configuration menu provided by the vendor.

Before Installing Sniffer Portable

The Sniffer Portable Application CD includes the software you need to get started using Sniffer Portable. Before installing Sniffer Portable, review the following installation notes:

- **For Windows XP and NT:** To install the Sniffer Portable software on a Windows XP or NT system, you must have system administrator (sa) privileges.
- **For IBM Thinkpad laptop users:** Sniffer Portable supports the Intel (R) PRO + miniPCI Adapter card. Before you install Sniffer Portable, we recommend updating the latest BIOS for your laptop, then downloading and installing the latest Intel driver to minimize Sniffer Portable installation issues. With the Intel (R) PRO + miniPCI Adapter card, no additional Sniffer enhanced driver is necessary.

Notes on Installing on top of Sniffer Portable 4.7.5

Unlike earlier versions of the Sniffer Portable software, Sniffer Portable 4.8 can be installed directly over any existing 4.7.5 version of Sniffer Portable. The procedure is described in [Installing Sniffer Portable on page 5](#) . Before performing such an installation, however, you should be aware that you must update existing Network General enhanced drivers to gain the benefits of the new release.

IMPORTANT: If your current installation is a version prior to 4.7.5 (including 4.7), uninstall the earlier version of the software before installing 4.8. If you install this release of Sniffer Portable on top of an existing Sniffer Portable installation, you **must** update the Network General drivers for any adapter cards supported by this release of Sniffer Portable to receive the benefits of the updated software! [Installing Adapters and Sniffer Enhanced Drivers on page 19](#) describes how to update existing Network General drivers.

Uninstalling Previous Versions of Sniffer Portable

Installing Sniffer Portable 4.8 on top of an existing Sniffer Portable 4.5 or 4.7 release is not supported. Only upgrades from an existing Sniffer Portable 4.70.5xx installation are supported. To install on top of an earlier Sniffer Portable 4.5 or 4.7 release, uninstall the earlier and then install Sniffer Portable 4.8. Future updates of Sniffer Portable 4.8 can be installed on top of an existing Sniffer Portable 4.8 installation. However, downgrades from a new version of Sniffer Portable 4.8 to an earlier version of Sniffer Portable 4.8 is not supported.

NOTE: If Sniffer Voice is installed on the target machine, it must be uninstalled before you uninstall the Sniffer Portable software.

To uninstall a previous version of Sniffer Portable:

- 1 Log in to the Sniffer PC machine with Administrator privileges.
- 2 Go to **Start > Settings > Control Panel > Add/Remove Programs**.
- 3 In the **Add/Remove Programs** window that appears, is there an entry for Sniffer Voice?
 - If **yes** — Uninstall Sniffer Voice and reboot the computer before uninstalling. Then access the **Add/Remove Programs** window again ([Step 2](#)) and uninstall the Sniffer Portable software.
 - If **no** — Select the entry for the Sniffer Portable software and click **Add/Remove**.
- 4 During the uninstallation, the wizard will ask you if you would like to remove unused shared files. Click **Yes to all** to remove all unused shared files.
- 5 Reboot the computer.

The target PC is now ready for installation of the Sniffer Portable software.

Upgrading from Sniffer Portable 4.7.5

If you are upgrading from Sniffer Portable 4.7.5, please note the following settings are migrated during the Sniffer Portable 4.8 installation:

- Monitor, capture, and display filters

- Trigger files
- Display Setup settings
- Address Book entries
- Settings specified within the **Tools > Options** menu
- Settings specified within the **Tools > Expert Options** menu
- Switches added using the **Monitor > Switch** command
- Settings specified within the **Database > Options** menu

NOTE: .csv files are updated with data for Sniffer Portable 4.8, however the .csv version in the file's title bar displays the older version.

- Sniffer Protocol drivers are updated
- ART settings
- Local Agent settings

NOTE: Any new multiple History Samples created by the user are **not** migrated.

Updating WLAN Miniport Drivers after Upgrade

If you are upgrading your Sniffer Portable installation to 4.8, after upgrading from 4.7 or 4.7.5, the miniport driver for all existing WLAN adapters needs to be updated.

Installing Sniffer Portable

Use the following procedure to install the Sniffer Portable software.

To install Sniffer Portable:

- 1 Before installing Sniffer Portable, disable any unused adapters, including the built-in adapter, on the machine in which you plan to install the software.

NOTE: After installing the adapter and driver you plan to use with the Sniffer Portable software and Sniffer Portable is successfully capturing

data, you can re-enable the unused adapter if desired.

- 2 From the Sniffer Portable Application CD, double-click **SnifferPro.exe**.

If the target PC supports the autorun function, an installation menu will automatically appear after inserting the Application CD. Select the **Install Product** option from this menu.

NOTE: If the installation menu does not appear automatically, you can also go to **Start > Run**, and enter `<drive letter>:\setup` and click **OK**. `<drive letter>` is the physical drive letter of the CD-ROM drive.

- 3 During the installation of the Sniffer Portable software, the Setup program will perform some different steps depending on the target system's operating system and existing configuration. The following notes describe some common occurrences during Sniffer Portable installations, as follows:
 - *Uninstalling the QoS Packet Scheduler Service on page 7* (Windows XP and Windows 2000)
 - *Removing the MAC Bridge Miniport Driver on XP on page 10* (Windows XP)
- 4 In the **Setup Complete** window, click **Finish** and restart your computer as prompted.
- 5 Start Sniffer Portable from **Start > Programs > Network General > Sniffer Portable > Sniffer**.

Sniffer Portable is installed with a temporary license configured to expire 15 days after the application is started for the first time. After connecting to Sniffer Portable for the first time, you will see a message indicating you need to authorize the software within 15 days. The 15-day period is called the "pre-authorization" period.

Before the 15 day pre-authorization period expires, you must authorize the Sniffer Portable software option(s) that you legally own. Failure to authorize the Sniffer Portable software will cause the hardware to automatically reboot and revert to an "unauthorized" state. You will not be able to use the Sniffer Portable software until it is properly authorized. See *Authorizing Sniffer Portable on page 13* for more information.

Uninstalling the QoS Packet Scheduler Service

The QoS Packet Scheduler service supports the 802.1P traffic prioritization system, allowing for the implementation of best-effort Quality of Service by conforming 802.1P equipment. The service is optional on Windows 2000. However, on Windows XP, the service is automatically bound to each installed adapter driver. To improve analyzer performance, Network General recommends that the QoS Packet Scheduler service provided with Windows XP and Windows 2000 be unbound from any adapters used with Sniffer Portable.

Sniffer Portable can only check for the existence of the QoS Packet Scheduler Service during installation. If you rebind the QoS Packet Scheduler Service to a Sniffer adapter at a later time, that adapter will experience decreased Sniffer performance.

IMPORTANT: Uninstalling the QoS Packet Scheduler service removes it from *all* installed adapters. Unbinding from individual adapters allows you to preserve the service for use with any non-Sniffer adapters. See *Unbinding the QoS Packet Scheduler Service from Selected Adapters* on page 9.

To uninstall the QoS Packet Scheduler Service:

- 1 At the conclusion Sniffer Portable installation on Windows XP or Windows 2000, you are provided the option to completely remove the QoS (Quality of Service) Packet Scheduler service from the target system (*Figure 1-1*).
- 2 To uninstall the QoS Packet Scheduler service completely, enable the **Uninstall the QoS Packet Scheduler Service** option shown in *Figure 1-1* and click **Finish**.

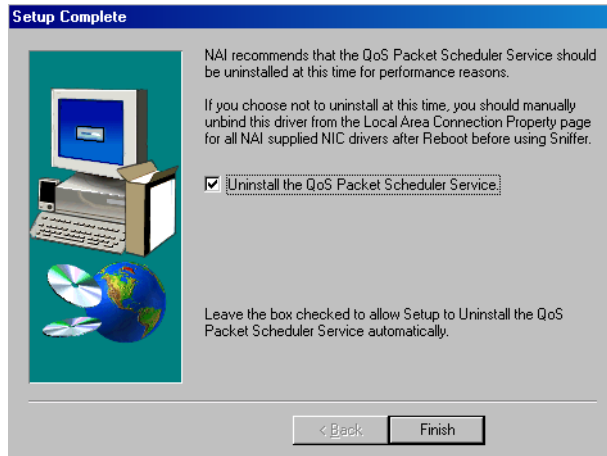


Figure 1-1. Uninstalling the QoS Packet Scheduler Service

If you do not remove the QoS Packet Scheduler Service during the Sniffer Portable setup, you can also perform the following:

- *Uninstalling the QoS Packet Scheduler Service after Installation on page 8*
- *Unbinding the QoS Packet Scheduler Service from Selected Adapters on page 9*

Uninstalling the QoS Packet Scheduler Service after Installation

Use the following procedure to uninstall the QoS Packet Scheduler Service after Sniffer Portable is installed.

To completely remove the QoS Packet Scheduler Service after completing the Sniffer Portable installation:

- 1 Open the Network Connections folder by selecting the **Start > Settings > Network Connections** option.
- 2 Right-click any of the Connection entries in the folder and select the **Properties** command from the menu that appears.

The Connection Properties dialog box appears, as in [Figure 1-2](#). The following example is for wireless connections.

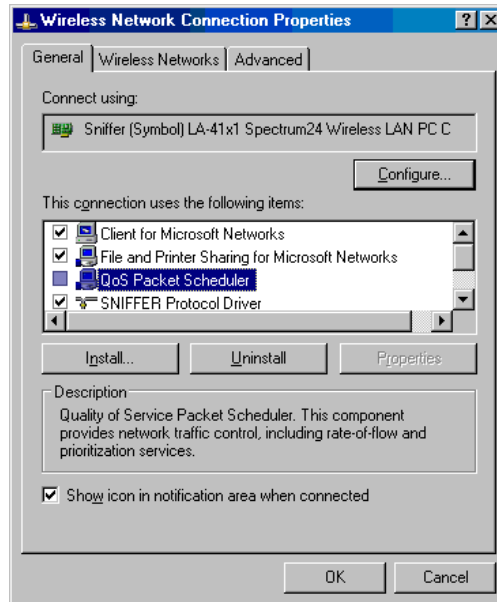


Figure 1-2. Local Area Connection Properties Dialog Box

- 3 De-select the **QoS Packet Scheduler** entry and click **Uninstall**.

A confirmation box appears.

- 4 Click **OK** to confirm that you want to uninstall the QoS Packet Scheduler service completely.

The QoS Packet Scheduler service is uninstalled.

- 5 Click **OK** on the Connection Properties dialog box.

Unbinding the QoS Packet Scheduler Service from Selected Adapters

Use the following procedure to unbind the QoS Packet Scheduler Service from selected adapters:

To unbind the QoS Packet Scheduler Service from selected adapters:

- 1 Open the Network Connections folder by selecting the **Start > Settings > Network Connections** option.
- 2 Right-click the Network Connection entry from which you want to unbind the QoS Packet Scheduler service and select the **Properties** command from the menu that appears.

The Network Connection Properties dialog box appears, as in [Figure 1-2 on page 9](#).

- 3 De-select the checkbox next to the **QoS Packet Scheduler** entry and click **OK**.
- 4 Repeat this procedure for each adapter you want to use with Sniffer Portable.

Removing the MAC Bridge Miniport Driver on XP

To improve analyzer performance, Network General recommends that the Network Bridge service provided with Windows XP not be used on a Sniffer Portable PC.

During installation of Sniffer Portable, Setup checks to see if you have an existing Network Bridge. If an existing Network Bridge is found, Setup provides the option of removing it automatically. If you do not remove an installed network bridge automatically during installation, you can still remove it manually after installation using the procedure below.

IMPORTANT: Sniffer Portable can only check for the existence of a network bridge during installation. If you add a network bridge after Sniffer Portable installation, Sniffer Portable performance will be decreased.

To remove a network bridge in Windows XP:

- 1 Open the Network Connections folder by selecting the **Start > Settings > Network Connections** option.

The Network Connections folder appears.
- 2 Under the **Network Bridge** section, right-click the **Network Bridge** entry and select the **Delete** command in the menu that appears.
- 3 Click **Yes** to confirm that you want to delete the network bridge.

Supported Adapters and Sniffer Enhanced Drivers

The Sniffer Portable Application CD includes Sniffer enhanced drivers for supported network adapter cards. Enhanced drivers modify the adapter to provide additional functionality to the card. For example, an enhanced driver may enable you to view additional network data or improve Sniffer Portable performance by capturing and decoding more traffic on busy networks. Later chapters detail how to install the Sniffer enhanced drivers listed in [Table 1-2](#).

Sniffer Portable works on a desktop PC with any Ethernet or Token Ring network adapter with an NDIS 3.0+ driver. Sniffer Portable works on a laptop computer with the Xircom CardBus Ethernet II 10/100 or Madge 16/4 Token Ring CardBus (Mk2) with an NDIS 5.0+ driver. However, you must use a supported adapter with a Sniffer enhanced driver to fully utilize all the features of Sniffer Portable.

Table 1-2. Supported Adapters With Sniffer Enhanced Drivers

Topology	Network Adapter Cards with Sniffer Enhanced Drivers	XP	2000	NT
Ethernet	10/100/1000 Ethernet integrated NICs	X	X	X
	Broadcom 1000BT NOTE: Broadcom 1000BT support does not include an enhanced driver.	X	X	
	Adaptec PCI Ethernet Adapter (ANA-21140/UC & ANA-6911/UC)		X	X
	Adaptec PCI Ethernet Adapter (ANA-6911A/TX/TXC)		X	X
	Adaptec 62011 10/100 PCI	X	X	X
	IBM Etherjet CardBus Ethernet Adapter	X	X	X
	Intel PRO/100 + Mini PCI Ethernet Adapter	X	X	X
	Xircom CardBus Ethernet II 10/100 (CBE2) Cardbus	X	X	X
	Xircom Realport CardBus Ethernet Adapter	X	X	X
	Xircom Realport2 CardBus Ethernet Adapter	X	X	X
	IBM 10/100 EtherJet CardBus Adapter	X	X	X
Token Ring	Madge PCMCIA Smart 16/4 Ringnode Mk2 (20-01)	X	X	X
	Madge 16/4 CardBus Adapter Mk2 (20-03)	X	X	X
	Madge Smart 16/4 PCI Ringnode Mk2/BM2 (51-02)		X	X
	Madge Smart 16/4 PCI Ringnode Mk3 (51-04)		X	X

Additional Enhanced Driver Installation Resources

Table 1-3 contains a list of adapters and enhanced drivers supported by Sniffer Portable that are not documented in this guide. Please see the document listed below for detailed information and installation instructions for that adapter and enhanced driver.

Table 1-3. Additional Supported Adapters and Enhanced Drivers

Network Adapter Cards with Sniffer Enhanced Drivers	Installation and Configuration Information
Atheros AR5002X Chipset Wireless Symbol Spectrum24 PCMCIA Cisco Aironet 340/350 PCMCIA Cisco Aironet 802.11a/b/g CardBus Agere ORiNOCO Gold PCMCIA Enterasys RoamAbout PCMCIA Proxim Harmony 802.11a CardBus Proxim 8480WD 802.11a/b/g Cardbus Card World Gold Proxim 8660WD 802.11a/b/g Cardbus Card World Gold	See the <i>Sniffer Technologies Wireless Guide</i> . NOTE: Installing an 802.11a/b/g combination card with other instances of combination cards is not supported.
Sniffer FDX PCI Card	See the <i>Sniffer Portable Full Duplex Ethernet Installation and Operations Guide</i> .
Sniffer HSSI PCI Adapter	See the <i>Sniffer Portable WAN Adapter Cards Installation, Connection, and Configuration Guide</i> .
Sniffer ATM SAR Adapter	See the <i>Sniffer Portable ATM Adapter Card Installation, Connection, and Configuration Guide</i> .
Sniffer (Xyratex) Gigabit Ethernet PCI Adapter (SX, LX)	See the <i>Sniffer Portable Gigabit Ethernet Installation and Operations Guide</i> .

Overview

This chapter provides information on authorizing your Sniffer Portable installation:

- *About Authorization*
- *Authorizing Sniffer Portable on page 14*
- *Creating a Request Authorization File on page 14*
- *Applying the Enable Authorization File on page 16*
- *Upgrading Sniffer Portable on page 17*

About Authorization

Sniffer Portable is installed with a temporary license configured to expire 15 days after the application is started for the first time. To use Sniffer Portable beyond this grace period, you must authorize your software using the Authorization utility.

The Authorization utility lets you perform a challenge-response scenario between the Sniffer Portable unit seeking authorization and the Network General Customer Care department. You will generate a **Request Authorization** file that is emailed to Customer Care. Once Customer Care receives the Request Authorization file, they will transmit an **Enable Authorization** file that enables a specific set of software options and functionality in Sniffer Portable.

You can also use the Authorization utility at any time after your initial authorization to add new features or components to Sniffer Portable. See *Upgrading Sniffer Portable on page 17* for more information.

Authorizing Sniffer Portable

The Sniffer Portable software comes with a temporary license that is configured to expire 15 days after the application starts for the first time. After connecting to Sniffer Portable for the first time, you will see a message indicating you need to authorize the software within 15 days. This 15-day period is called the "pre-authorization" period. The pre-authorization period includes support for the feature-rich Sniffer Portable Field Service option, as well as Sniffer Voice and Sniffer Mobile.

Before the 15 day pre-authorization period expires, you must **authorize** the Sniffer Portable software options that you legally own. Failure to authorize the Sniffer Portable software will cause the hardware to automatically reboot and revert to an 'unauthorized' state. You will not be able to use the Sniffer Portable software until it is properly authorized.

The authorization process includes the following steps:

- *Creating a Request Authorization File on page 14*
- *Applying the Enable Authorization File on page 16*

Creating a Request Authorization File

NOTE: Local administrator rights are required to create a request file.

To create a request options file:

- 1 From the Sniffer Portable machine, go to **Start > Programs > Network General > Sniffer Portable > Authorization**.
- 2 Select **Request Authorization** and click **OK**.
- 3 The **Request Authorization** dialog box ([Figure 2-1](#)) appears.

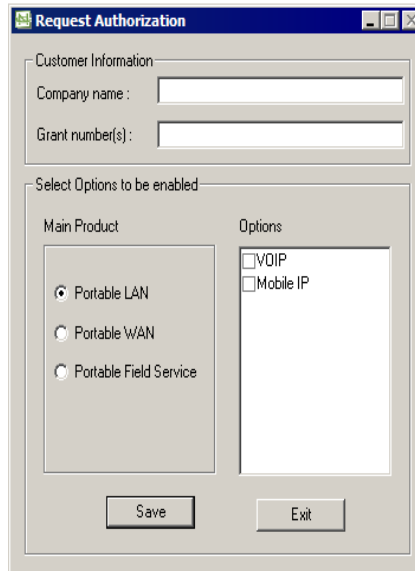


Figure 2-1. Request Authorization Dialog Box

- 4 In the Request Authorization dialog box enter your company name and your grant number(s) in the fields provided. Separate multiple grant numbers with a comma.
- 5 Under **Select Options to be enabled**, select the options to be enabled for the Sniffer Portable machine. Options include:
 - **Sniffer Portable LAN.** Enable this option for 10/100/1000, wireless, Token Ring, and Sniffer Reporter activation.
 - **Sniffer Portable WAN.** Enable this option for WAN, ATM, POS, and Sniffer Reporter activation.
 - **Sniffer Portable Field Service.** Enable this option for Sniffer Portable LAN and Sniffer Portable WAN, Sniffer Reporter, as well as Sniffer Voice and Sniffer Mobile activation.
 - **VOIP.** Enable this add-on option if you have purchased Sniffer Voice.
 - **Mobile IP.** Enable this add-on option if you have purchased Sniffer Mobile.
- 6 Click **Save** to generate a **Request Authorization** file.

The Request Authorization file name is determined by the first grant number in the grant number field. However, you may assign a 'user-friendly' name, if you wish.

NOTE: The **RequestOptions.log** and **EnableOptions.log** are generated during the Request Authorization and Enable Authorization process. If you encounter problems, check the appropriate log file in the installation directory. The default directory on XP, Windows 2000 and NT machines is *C:\Program Files\NAI\SnifferNT\Program*.

- 7 Click **OK** when the Authorization window confirms the **Request Authorization** file was generated successfully.
- 8 Click **Exit** and **Yes** to confirm you want to exit.
- 9 From a machine with an Internet connection, open a browser window and navigate to the following Web site:

<https://licensing.networkgeneral.com>

The Web site provides online access to product licensing 24 hours a day, 7 days a week.
- 10 Enter the appropriate information provided from your grant letter in the fields provided. Follow the onscreen instructions to finish the automated license request process.
- 11 After receiving the **Enable Authorization** file from the automated licensing process, save the file to a location accessible to Sniffer Portable.

Applying the Enable Authorization File

Once you receive the Enable Authorization file from Customer Care, apply the file to your Sniffer Portable software to fully authorize the machine.

NOTE: Local administrator rights are required to apply the Enable Authorization file.

To apply the Enable Authorization file:

- 1 On the Sniffer Portable PC, go to **Start > Programs > Network General > Sniffer Portable > Authorization** and select **Enable Authorization** then click **OK**. The **Enable Authorization** dialog box opens.
- 2 In the **Enable Authorization** dialog box, click **Load** and browse to the location you saved the **Enable Authorization** file. Select the file and click **Open**. A message will appear that verifies a successful authorization.

- 3 Click **OK** and **Exit**. The Sniffer Portable PC will automatically reboot.
- 4 Confirm that the authorization process was successful after the machine reboots:
 - a Start Sniffer Portable and go to **Help > About**. The newly enabled options will appear in the dialog box.

NOTE: The **RequestOptions.log** and **EnableOptions.log** are generated during the Request Authorization and Enable Authorization process. If you encounter problems, check the appropriate log file in the installation directory. The default directory on XP, Windows 2000 and NT machines is *C:\Program Files\NAI\SnifferNT\Program*. Contact Customer Care if you are unable to properly authorize Sniffer Portable. See [page viii](#) for contact information.

Upgrading Sniffer Portable

If you would like to add additional features, you can re-authorize Sniffer Portable to expand your feature set using the same authorization method described in [Authorizing Sniffer Portable on page 14](#).

Contact your Sales Representative to purchase additional features prior to re-authorizing Sniffer Portable. Once you have purchased the desired features from your Sales Representative, follow the same authorization steps described in [Authorizing Sniffer Portable](#) to enable the features. When prompted to select the enabled features, select both the existing and new options and follow the on-screen instructions.

Installing Adapters and Sniffer Enhanced Drivers

3

Overview

After installing the Sniffer Portable software, install the adapter and Sniffer enhanced driver appropriate to your Sniffer Portable configuration. This chapter provides detailed installation instructions for the Sniffer enhanced drivers for Ethernet adapters.

NOTE: Unless otherwise noted, the instructions support Notebook PC, PAC 65, and Sniffer FlexPAC platforms.

Use [Table 3-1](#) to quickly find the adapter and Sniffer enhanced driver installation instructions you need for your Sniffer Portable PC configuration.

Table 3-1. Finding What You Need in this Chapter

To perform the following...	for...	see...
Install Sniffer supported adapters and enhanced drivers for Ethernet topologies	Windows XP	page 19
	Windows NT	page 21
	Windows 2000	page 23

Installing Adapters and Sniffer Enhanced Drivers on Windows XP

The Sniffer enhanced drivers for Windows XP are plug and play drivers. The default installation location for the Sniffer enhanced drivers is *C:\Program Files\Nai\SnifferNT\Driverlen*. [Table 3-2](#) lists the supported adapters for Windows XP and the subdirectories where the Sniffer enhanced drivers can be found.

Table 3-2. Windows XP Sniffer Enhanced Driver Locations

Supported Adapter	<local install drive>: \Program Files\NAI\SnifferNT\Driverlen\...
Sniffer (Intel Pro 100)	Intel\WinXP
Sniffer (Xircom)	Xircom\WinXP
Sniffer (IBM Etherjet)	IBM\WinXP
Adaptec 62011	Adaptec.620XX\WinXP

To install a Sniffer supported adapter and driver in Windows XP:

- 1 Make sure the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Log in to Windows XP as an Administrator.
- 3 Insert the adapter in an available card slot on the target machine.

Windows XP automatically detects the new card and installs its native device driver.
- 4 Open the Network Connections folder by selecting **Start > Settings > Control Panel > Network Connections > Local Area Network**.
- 5 Right-click the Network Connection entry associated with the adapter you just inserted and select **Properties** from the menu.
- 6 Click **Configure** to open the Network Connections Properties dialog box.
- 7 Click the **Driver** tab.
- 8 Click **Update Driver**.

The Hardware Update Wizard starts.
- 9 Select the **Install from a list or specific location (Advanced)** option, and click **Next**.
- 10 Select the **Don't search** option and click **Next**.
- 11 Click **Have Disk**.

The Install from Disk dialog box appears prompting you to supply the path to the driver to install.
- 12 Click **Browse** and navigate to the path where the driver for the selected adapter is installed. See [Table 3-2](#) for the location of the appropriate driver files.

- 13 Click **Open** in the Browse dialog box.

You are returned to the Install from Disk dialog box.

- 14 Click **OK** on the Install from Disk dialog box.

If the operating system is configured to alert you to unsigned drivers, a dialog box will appear warning you that you are about to install a driver that has not been verified by Microsoft Corporation.

- 15 Click **Continue Anyway** to continue the installation.

The wizard installs the driver. When it has finished, it displays a screen indicating that the driver is installed.

- 16 Click **Finish**.

- 17 Click **OK** to clear the Adapter Properties dialog box.

Installing Adapters and Sniffer Enhanced Drivers on Windows NT

The Sniffer enhanced drivers for Windows NT are **not** plug and play and must be manually installed. If you have a previously installed driver, you must first uninstall the driver before installing the Sniffer enhanced driver.

The Sniffer enhanced drivers are placed in the *<local install drive>:\Program Files\Nai\SnifferNT\Driver\en* directory during the Sniffer Portable installation. [Table 3-3](#) lists the supported adapters for Windows NT and the subdirectories where the Sniffer enhanced drivers can be found.

Table 3-3. Windows NT Sniffer Enhanced Driver Locations

Supported Adapter	<i><local install drive>: Program Files\Nai SnifferNT\Driver\en\...</i>
Sniffer (Adaptec) PCI Ethernet Adapter (ANA-21140/UC & ANA-6911/UC)	adaptec\WinNT
Sniffer (Adaptec) PCI Ethernet Adapter (ANA-6911A/TX/TXC)	
Sniffer (Xircom)	Xircom\WinNT
Sniffer (IBM)	Ibm\WinNT
Adaptec 62011	Adaptec.620XX\WinNT

To install adapters and Sniffer enhanced drivers on Windows NT:

- 1 Ensure Sniffer Portable software is installed. If it is not installed, install it now.
- 2 If you have a previously installed driver (a previous version of a Sniffer driver or another vendor's driver), you must first uninstall the driver before installing the Sniffer enhanced driver. Remove drivers in Windows NT through the Adapters tab of the Network control panel.
- 3 Shut down the computer.
- 4 Following the manufacturer's instructions, insert the supported adapter into an available slot in your computer.
- 5 Start the computer and log in to Windows NT as an Administrator.
- 6 Go to **Start > Settings > Control Panel**, and double-click **Network**.
- 7 Click the **Adapters** tab.
- 8 Click **Add**.
- 9 In the **Select Network Adapter** dialog box, click **Have Disk**.
- 10 In the **Insert Disk** dialog box, enter the directory path where the Sniffer enhanced driver is located. See [Table 3-3](#) for Sniffer enhanced driver locations.

For example, enter C:\Program Files\Nai\SnifferNT\Driver\en\Xircom\WinNT for a Xircom Sniffer enhanced driver.
- 11 Click **OK**.
- 12 Select the appropriate adapter in the **Select OEM Option** dialog box and click **OK**.
- 13 A Configuration dialog box with the adapter name in the title bar appears. Do **not** change the default setup specific to your installed adapter. Click **OK**.
- 14 Click the **Bindings** tab to initialize the adapter.
- 15 Click the **Protocols** tab, select TCP/IP Protocol, then click **Properties**.

The Microsoft TCP/IP Properties dialog box opens.
- 16 In the Microsoft TCP/IP Properties dialog box, ensure the correct adapter name is highlighted in the Adapter field.
- 17 Select one of the following IP address settings for the adapter:

- **Obtain an IP address from a DHCP server.** Reads and assigns the IP address for the driver automatically.
- **Specify an IP address.** You must manually enter IP address information for the driver in each field.

18 Click **OK**.

19 Click **Close**.

20 If an application error occurs in rundll32.exe, click **Cancel** in the error message box. All added or modified settings will be saved.

21 Restart your computer.

Installing Adapters and Sniffer Enhanced Drivers on Windows 2000

The Sniffer enhanced drivers for Windows 2000 are plug and play drivers. The default installation location for the Sniffer enhanced drivers is *C:\Program Files\Nai\SnifferNT\Driverlen*. Table 3-4 lists the supported adapters for Windows 2000 and the subdirectories where the Sniffer enhanced drivers can be found.

Table 3-4. Windows 2000 Sniffer Enhanced Driver Locations

Supported Adapter	<local install drive>: Program Files\Nai SnifferNT\Driverlen\...
Sniffer (Adaptec) PCI Ethernet Adapter (ANA-21140/UC & ANA-6911/UC) Sniffer (Adaptec) PCI Ethernet Adapter (ANA-6911A/TX/TXC)	adaptec\Win2K
Sniffer (Intel)	Intel\Win2K
Sniffer (Xircom)	Xircom\Win2K
Sniffer (IBM)	Ibm\Win2K
Adaptec 62011	Adaptec.620XX\Win2K

The driver installation procedure for Windows 2000 is somewhat different depending on whether you are updating an existing driver (either a previous version of the Sniffer driver or another vendor's driver) or installing the adapter and driver for the first time. Use the appropriate procedure below.

- *First-time Installation (Windows 2000) on page 24*

- *Updating Existing Drivers (Windows 2000) on page 25*

First-time Installation (Windows 2000)

For Windows 2000, you install the adapter and driver for the first time by inserting the card in the PC and using the Found New Hardware Wizard, as follows.

To install an adapter and driver in Windows 2000 for the first time:

- 1 Make sure the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Insert the supported adapter into an available slot in your computer following the manufacturer's instructions.
- 3 Start the computer and log in as an Administrator.

Windows 2000 presents the Found New Hardware Wizard to help you install a new driver for the newly detected adapter.

NOTE: If Windows 2000's plug-and-play feature automatically installs a driver for the adapter instead of starting the Found New Hardware Wizard, see *Updating Existing Drivers (Windows 2000) on page 25* to update the existing driver.

- 4 Click **Next** in the Wizard window.
The Install Hardware Device Drivers window appears.
- 5 Select the **Search for a suitable driver for my device** option and click **Next**.
The Locate Driver Files window appears.
- 6 Check only the **Specify a location** option and click **Next**.
The Found New Hardware Wizard prompts you to supply a path to the device driver.
- 7 Click **Browse** and browse to the location of the Sniffer enhanced driver. See *Table 3-4* for Sniffer enhanced driver locations.
- 8 Click **OK**.

Windows 2000 scans for the driver and presents the Driver Files Search Results window indicating that it has found the driver you specified in the previous step.

- 9 Click **Next** on the Driver Files Search Results window.

The Digital Signature Not Found warning appears asking you if you want to continue the installation.

- 10 Click **Yes** on the Digital Signature Not Found warning to continue the installation.
- 11 Click **Finish**.
- 12 Restart the computer.

Updating Existing Drivers (Windows 2000)

For Windows 2000, you update an existing driver using the Device Manager. The procedure is the same regardless of whether you are updating the vendor's existing driver or a previous version of the Sniffer driver.

To update an existing driver in Windows 2000:

- 1 Make sure the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Make sure a supported adapter is installed in the target machine.
- 3 Start the computer and log in to Windows 2000 as an Administrator.
- 4 Start the Device Manager as follows:
 - a Right-click the **My Computer** icon and select the **Properties** command from the menu that appears.
 - b In the dialog box that appears, click the **Hardware** tab.
 - c Click **Device Manager**.
 - d Expand the **Network Adapters** entry by clicking the + sign adjacent to its entry.
- 5 Right-click the entry for the adapter to be updated and select the **Properties** command from the menu that appears.

NOTE: Right-click the **Sniffer (Adaptec) PCI Fast Ethernet (ANA-6911/UC)** adapter for DEC 21140 chips or **Sniffer (Adaptec) PCI Fast Ethernet (ANA-6911ATXC/ATX)** adapter for DEC 21143 chips.

- 6 In the Adapter Properties dialog box, click the **Driver** tab.
- 7 Click **Update Driver**.

The Upgrade Device Driver Wizard starts.

- 8 Click **Next** in the Welcome dialog box.
- 9 In the Install Hardware Device Drivers dialog box, select “**Display a list of known drivers for this device so that I can choose a specific driver**” and click **Next**.

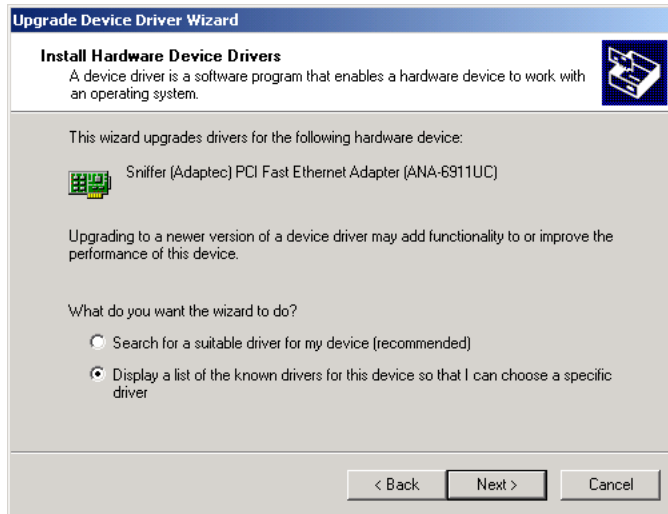


Figure 3-1. Install Hardware Device Drivers (Adaptec Example)

- 10 In the Select Network Adapter dialog box, select the appropriate adapter and click **Have Disk**.

NOTE: If you installed Sniffer (Adaptec) adapters, select **Sniffer (Adaptec) PCI Fast Ethernet (ANA-6911/UC)** for DEC 21140 chips or **Sniffer (Adaptec) PCI Fast Ethernet (ANA-6911ATXC/ATX)** for DEC 21143 chips.

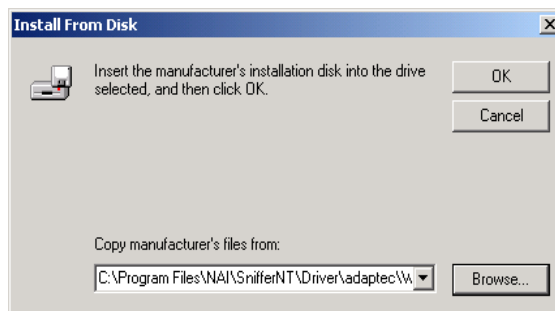


Figure 3-2. Install From Disk Dialog Box (Adaptec Example)

- 11 In the Install From Disk dialog box, browse to the location of the Sniffer enhanced driver. See Table 3-4 for Sniffer enhanced driver locations. Click **OK**.
- 12 In the Select Network Adapter dialog box, click **Next**.

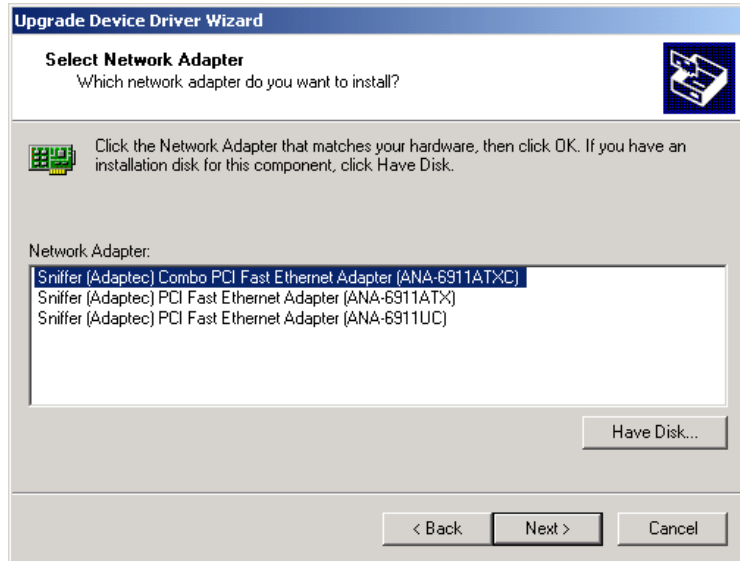


Figure 3-3. Select Network Adapter Dialog Box (Adaptec Example)

- 13 In the Start Device Driver Installation dialog box, click **Next**.

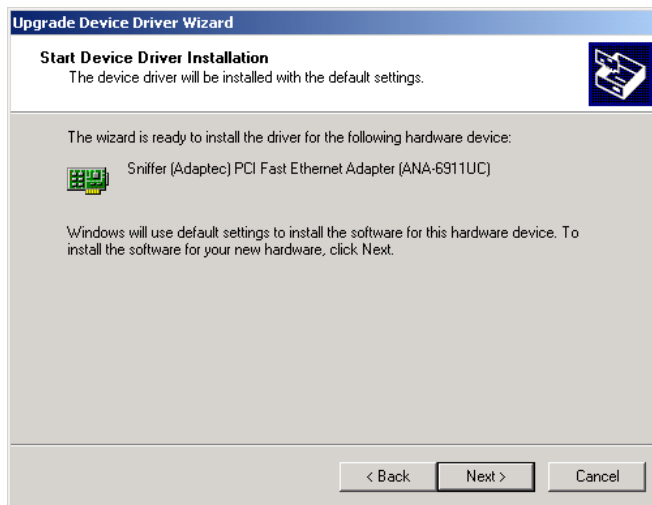


Figure 3-4. Start Device Driver Installation (Adaptec Example)

- 14 At the message "Digital Signature Not Found," click **Yes** to successfully continue the Sniffer enhanced driver update.
- 15 Click **Finish**.
- 16 Restart the computer.

Notes on Previous Driver Installations on Windows 2000

For backup purposes, if you had previously installed drivers, your original drivers are copied into the *<local install directory>:\Program Files\Nai\Sniffer\Driver\en\<Vendor name> \Win2K* directory.

Installing Madge Adapters and Enhanced Drivers

4

Overview

After installing the Sniffer Portable software, install the adapter and enhanced driver appropriate to your Sniffer Portable configuration. This chapter provides detailed installation instructions for Madge adapters and Sniffer enhanced drivers.

NOTE: If you are installing a Madge Mk2 PCMCIA or CardBus adapter on either a Windows 2000 or Windows XP PC, you must set some configuration options for the card manually. Instructions on how to do this are found in the corresponding installation sections. See [Configuring Madge Mk2 PCMCIA/CardBus Adapters \(Windows XP\)](#) on page 34 and [Configuring Madge Mk2 PCMCIA/CardBus Adapters \(Windows 2000\)](#) on page 38.

Use [Table 4-1](#) to quickly find the adapter and enhanced driver installation instructions you need for your Sniffer Portable PC configuration.

Table 4-1. Finding What You Need in this Chapter

To perform the following...	for...	see...
Install Madge adapters and enhanced drivers	Windows NT	page 30
	Windows XP	page 33
	Windows 2000	page 35
Install Madge PCI adapters and enhanced drivers	Windows NT	page 39
	Windows 2000	page 35
Installing Madge PCMCIA and CardBus adapters and enhanced drivers	Windows NT	page 40
	Windows XP	page 33
	Windows 2000	page 35

Installing Madge Adapters and Enhanced Drivers

The instructions provided in this section detail installing supported Madge adapters and enhanced drivers for PII, PIII and FlexPAC systems.

Windows NT

The Madge adapters and the Sniffer enhanced drivers for Windows NT are **not** plug and play and must be manually installed. The Madge enhanced drivers are placed in the <local install drive>: \Program Files\Nai\SnifferNT\Driverlen\TRMadge directory during the Sniffer Portable installation.

NOTE: See *Installing Madge PCI Adapters and Enhanced Drivers on page 39* for instructions on installing Madge PCI adapters and enhanced drivers on Windows NT, and *Installing Madge PCMCIA and CardBus Adapters and Enhanced Drivers on page 40* for instructions on installing Madge PCMCIA and CardBus adapters and enhanced drivers on Windows NT.

To install Madge ISA adapters and enhanced drivers on Windows NT:

- 1 Ensure Sniffer Portable software is installed. If it is not installed, install it now.
- 2 If you have a previously installed driver (a previous version of a Sniffer driver or another vendor's driver), you must first uninstall the driver before installing the Sniffer enhanced driver. Remove drivers in Windows NT through the Adapters tab of the Network control panel.
- 3 Shut down the computer.
- 4 Following the manufacturer's instructions, insert the supported adapter into an available slot in your computer.
- 5 Start the computer and log in to Windows NT as an Administrator.
- 6 Go to Start > Programs > Administrative Tools (Common) > Windows NT Diagnostics.
- 7 In the Windows NT Diagnostics dialog box, click the **Resources** tab. The interrupt numbers currently in use on the computer are listed.
- 8 Choose an available IRQ and record the number for later use.
- 9 Click **I/O Port** in the Windows NT Diagnostics dialog. The I/O addresses currently in use on the computer are listed.

NOTE: The Madge ISA card only supports the following I/O locations:

0A20, 1A20, 2A20, and 3A20.

- 10 Choose an available I/O address from the supported list in [Step 9](#) and record the number for later use.
- 11 Click **OK** to exit the Windows NT Diagnostics dialog.
- 12 Next run the Token Ring configuration program from DOS to configure the hardware settings on the Madge ISA adapter card. The configuration program is installed when you install the Sniffer Portable software.
- 13 Insert a DOS boot disk in the floppy drive. Sniffer does not supply a DOS boot disk.
- 14 Navigate to the following directory:
`<local install drive>:\Program Files\Nai\SnifferNT\Driver\en\TRMadge`
- 15 Type `trcfg` at the prompt to run the `trcfg.exe` program.
- 16 Press F4 to start the Token Ring configuration program.
- 17 Select the **Madge Smart 16/4 AT Plus Ringnode** adapter and press Enter.
- 18 Change the Token Ring configuration options to the recommended settings listed in [Table 4-2](#). Press Tab to select a field, then press Enter to see a list of possible values, and then press F4.

Table 4-2. Token Ring Configuration Options

Option	Recommended Setting
Transfers	16bit PIO
IO Port	The address recorded in Step 9 .
Ring Speed	4 or 16 depending on your network.
Interrupt	The number recorded in Step 8 .
Smartrom	Disabled

- 19 When prompted to update the card configuration, press F4 (yes), and press F4 again to exit the program.
- 20 Eject the DOS boot disk and restart the computer.
- 21 To complete the enhanced driver installation, turn to the enhanced driver installation instructions starting on [page 21](#) and continue the procedure starting at [Step 6](#).

Previous Adapter Installations on Windows NT

If you have a Madge adapter card installed and working with a non-Sniffer driver, you should install the Sniffer enhanced driver. The instructions provided in this section detail installing enhanced drivers for pre-existing or pre-installed Madge adapters on your Sniffer PC.

To install enhanced drivers for existing Madge adapters on Windows NT:

- 1 Ensure Sniffer Portable software is installed. If it is not installed, install it now.
- 2 If you have a previously installed driver, you must first uninstall the driver before installing the Sniffer enhanced driver. Remove drivers in Windows NT through the Adapters tab of the Network control panel.
- 3 Go to Start > Settings > Control Panel, and double-click **Network**.
- 4 Click the **Adapters** tab, select the Madge adapter, then click **Properties**.
- 5 Record the I/O, IRQ, transfer method, and then click **Cancel**.
- 6 Click the **Adapters** tab, select the Madge adapter, and then click **Remove**.
- 7 Click **Add**.
- 8 In the Select Network Adapter dialog, click **Have Disk**.
- 9 In the Insert Disk dialog box, specify the directory (including complete path) where the enhanced driver is located. The default location is shown below:

 <local install drive>:\Program Files\Nai\SnifferNT\Driver\en\TRMadge\WinNt
- 10 Select **Network General Smart 16/4 AT Plus Ringnode**, then click **OK**.
- 11 In the Configuration dialog box, change the settings to match the configuration settings recorded in [Step 5](#).
- 12 At this time, you can set any network related settings (for example, TCP/IP settings). When set, click **OK** to close the Network dialog box.
- 13 If an application error occurs in rundll32.exe, click **Cancel** in the error message box. All added or modified settings will be saved.
- 14 Restart the computer.

Windows XP

The Sniffer enhanced drivers for Windows XP are plug and play drivers. The Madge enhanced drivers are placed in the <local install drive>: \Program Files\Nai\SnifferNT\Driver\en\TRMadge\WinXP directory during the Sniffer Portable installation.

To install Madge adapters and enhanced drivers in Windows XP:

- 1 Make sure the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Log in to Windows XP as an Administrator.
- 3 Insert the adapter in an available card slot on the target machine.

Windows XP automatically detects the new card and installs its native device driver.

- 4 Open the Network Connections folder by selecting the **Start > Control Panel > Network Connections** option.
- 5 Right-click the Network Connection entry associated with the adapter you just inserted and select the **Properties** command from the menu that appears.

The Network Connections Properties dialog box appears.

- 6 If the **QoS Packet Scheduler** service is listed in the **This connection uses the following items** list, disable it now by deselecting the adjacent checkbox. See *Unbinding the QoS Packet Scheduler Service from Selected Adapters on page 9* for details.
- 7 Click the **Configure** button.

The Adapter Properties dialog box for the selected adapter appears.

- 8 Click the **Driver** tab.
- 9 Click the **Update Driver** button.

The Hardware Update Wizard starts.

- 10 Select the **Install from a list or specific location (Advanced)** option. and click **Next**.
- 11 Select the **Don't search** option and click **Next**.
- 12 Does your adapter appear in the Wizard's list?
 - If yes, highlight its entry and click the **Have Disk** button.
 - If no, simply click the **Have Disk** button.

The Install from Disk dialog box appears prompting you to supply the path to the driver to install.

- 13 Click the **Browse** button and navigate to the path where the driver for the selected adapter is installed. The drivers for Madge adapters on Windows XP are located at:

<local install drive>: \Program Files\Nai\SnifferNT\Driver\en\TRMadge\WinXP

- 14 Click **Open** on the Browse dialog box.

You are returned to the Install from Disk dialog box.

- 15 Click **OK** on the Install from Disk dialog box.

If the operating system is configured to alert you to unsigned drivers, a dialog box will appear warning you that you are about to install a driver that has not been verified by Microsoft Corporation.

- 16 Click the **Continue Anyway** button to continue the installation.

The wizard installs the driver. When it has finished, it displays a screen indicating that the driver is installed.

- 17 Click the **Finish** button to complete the installation.

You are returned to the Adapter Properties dialog box.

- 18 Click the **OK** button to clear the Adapter Properties dialog box.

Configuring Madge Mk2 PCMCIA/CardBus Adapters (Windows XP)

Before you can use the Madge Mk2 PCMCIA or CardBus adapter with Sniffer Portable on a Windows XP PC, you must set some configuration options manually. The following procedure explains how.

To configure the Madge Mk2 PCMCIA or CardBus adapter:

- 1 Open the Network Connections folder by selecting the **Start > Settings > Network Connections** option.
- 2 Right-click the Network Connection entry associated with the Madge Mk2 adapter and select the **Properties** command from the menu that appears.

The Network Connections Properties dialog box appears.

- 3 Click the **Configure** button.

The Adapter Properties dialog box for the Madge Mk2 adapter appears.

- 4 Click the **Advanced** tab and make the following configuration changes:
 - Set **Promiscuous mode** support to **Yes**.
 - Set **Respond to TEST/XID frames** to **No**.
 - Set **Ring Speed** to **16 Mbit/s**.
- 5 Click **Close**.

Windows 2000

The Madge enhanced drivers are placed in the *<local install drive>: \Program Files\Nai\SnifferNT\Driver\en\TRMadge* directory during the Sniffer Portable installation.

The driver installation procedure for Windows 2000 is somewhat different depending on whether you are updating an existing driver (either a previous version of the Sniffer driver or another vendor's driver) or installing the adapter and driver for the first time. Use the appropriate procedure below.

- *First Time Installation (Windows 2000) on page 35*
- *Updating Existing Drivers (Windows 2000) on page 36*

First Time Installation (Windows 2000)

For Windows 2000, you install an adapter for the first time by inserting the card in the PC and using the Found New Hardware Wizard, as follows.

To install an adapter and driver in Windows 2000 for the first time:

- 1 Make sure the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Insert the Madge adapter into an available slot in your computer following the manufacturer's instructions.
- 3 Start the computer and log in as an Administrator.

Windows 2000 presents the Found New Hardware Wizard to help you install a new driver for the newly detected adapter.

NOTE: If Windows 2000's plug-and-play feature automatically installs a driver for the adapter instead of starting the Found New Hardware Wizard, turn to *Updating Existing Drivers (Windows 2000) on page 36* to update the existing driver.

- 4 Click **Next** in the Wizard window.

The Install Hardware Device Drivers window appears.

- 5 Select the **Search for a suitable driver for my device** option and click **Next**.

The Locate Driver Files window appears.

- 6 Check only the **Specify a location** option and click **Next**.

The Found New Hardware Wizard prompts you to supply a path to the device driver.

- 7 Click the **Browse** button and browse to the <local install drive>:\Program Files\Nai\SnifferNT\Driver\en\TRMadge\Win2K directory.
- 8 Click the **OK** button.

Windows 2000 scans for the driver and presents the Driver Files Search Results window indicating that it has found the driver you specified in the previous step.

- 9 Click **Next** on the Driver Files Search Results window.

The Digital Signature Not Found warning appears asking you if you want to continue the installation.

- 10 Click **Yes** on the Digital Signature Not Found warning to continue the installation.
- 11 Click **Finish**.
- 12 Restart the computer.

- 13 Manually configure the Madge Mk2 driver for Sniffer Portable operations using the procedure in *Configuring Madge Mk2 PCMCIA/CardBus Adapters (Windows 2000)* on page 38.

Updating Existing Drivers (Windows 2000)

For Windows 2000, you update an existing driver using the Device Manager. The procedure is the same regardless of whether you are updating the vendor's existing driver or a previous version of the Sniffer driver.

To install Madge adapters and enhanced drivers on Windows 2000:

- 1 Make sure that the Sniffer Portable software is installed. If it is not installed, install it now.
- 2 Make sure a supported adapter is installed in the target machine.
- 3 Start the computer and log in to Windows 2000 as an Administrator.

- 4 Start the Device Manager as follows:
 - a Right-click the **My Computer** icon and select the **Properties** command from the menu that appears.
 - b In the dialog box that appears, click the **Hardware** tab.
 - c Click the **Device Manager** button.
 - d Expand the **Network Adapters** entry by clicking the + sign adjacent to its entry.
- 5 Right-click the entry for the Madge adapter and select the **Properties** command from the menu that appears.
- 6 In the Adapter Properties dialog box, click the **Driver** tab.
- 7 Click the **Update Driver** button.

The Upgrade Device Driver Wizard starts.
- 8 Click **Next** in the Welcome dialog box.
- 9 Select **“Display a list of known drivers for this device so that I can choose a specific driver.”**
- 10 Click **Next**.
- 11 In the Upgrade Device Driver wizard, click **Have Disk**.
- 12 In the Install From Disk dialog box, browse to the <local install drive>:\Program Files\Nai\SnifferNT\Driver\en\TRMadge\Win2K directory.
- 13 Click **OK**.
- 14 In the Upgrade Device Driver wizard, select the installed Madge adapter.
- 15 Click **Next**.
- 16 In the dialog box that appears, click **Next**.
- 17 At the message “Digital Signature Not Found,” click **Yes** to continue the driver update.
- 18 Click the **General** tab in the Connection Properties dialog box. If the **QoS Packet Scheduler** service is listed in the **Components checked are used by this connection** list, disable it now by deselecting the adjacent checkbox. See *Unbinding the QoS Packet Scheduler Service from Selected Adapters on page 9* for details.
- 19 Click **Finish**.
- 20 Restart the computer.

- 21 Manually configure the Madge Mk2 driver for Sniffer Portable operations using the procedure in *Configuring Madge Mk2 PCMCIA/CardBus Adapters (Windows 2000)* on page 38.

Configuring Madge Mk2 PCMCIA/CardBus Adapters (Windows 2000)

Before you can use the Madge Mk2 PCMCIA or CardBus adapter with Sniffer Portable on a Windows 2000 PC, you must set some configuration options manually. The following procedure explains how.

To configure the Madge Mk2 PCMCIA or CardBus adapter:

- 1 Start the Device Manager as follows:
 - a Right-click the **My Computer** icon and select the **Properties** command from the menu that appears.
 - b In the dialog box that appears, click the **Hardware** tab.
 - c Click the **Device Manager** button.
 - d Expand the **Network Adapters** entry by clicking the + sign adjacent to its entry.
- 2 Right-click the entry for the Madge Mk2 adapter and select the **Properties** command from the menu that appears.
- 3 Click the **Advanced** tab and make the following configuration changes:
 - Set **Promiscuous mode** support to **Yes**.
 - Set **Respond to TEST/XID frames** to **No**.
 - Set **Ring Speed** to **16 Mbit/s**.
- 4 Click **Close**.

Installing Madge PCI Adapters and Enhanced Drivers

The instructions provided in this section detail installing supported Madge PCI adapters and enhanced drivers for PII, PIII and FlexPAC systems.

NOTE: For Windows XP and 2000, the instructions for installing the Madge PCI adapter and enhanced driver are the same as the instructions for *Installing Madge Adapters and Enhanced Drivers* for *Windows XP* on page 33 and *Windows 2000* on page 35.

Windows NT

To install Madge PCI adapters and enhanced drivers on Windows NT:

- 1 Ensure Sniffer Portable software is installed. If it is not installed, install it now.
- 2 If you have a previously installed driver (a previous version of a Sniffer driver or another vendor's driver), you must first uninstall the driver before installing the Sniffer enhanced driver. Remove drivers in Windows NT through the Adapters tab of the Network control panel.
- 3 Shut down the computer.
- 4 Following the manufacturer's instructions, insert the Madge PCI adapter card into an available slot in your computer.
- 5 Start the computer.
- 6 Go to Start > Settings > Control Panel.
- 7 Double-click the **Network** icon, then click the **Adapters** tab.
- 8 Click **Add**.
- 9 In the **Select Network Adapter** dialog box, click **Have Disk**.
- 10 In the **Insert Disk** dialog box specify the complete path for the Madge PCI Adapter enhanced driver.
- 11 Click **OK**.
- 12 In the **Select OEM Option** dialog box select **Sniffer (Madge) Automated Installation - RECOMMENDED** and click **OK**.

The Network dialog box appears with the Madge PCI adapter installed.

- 13 In the **Network** dialog box, click **Close** to perform the bindings.
The TCP/IP Setup dialog box appears.
- 14 In the Adapter drop down list, select the installed adapter.
- 15 Enter the IP Address and Subnet Mask, and click **OK**.
- 16 Restart the computer.

Windows XP and 2000

For Windows XP and 2000, the instructions for installing the Madge PCI adapter and enhanced driver are the same as the instructions for *Installing Madge Adapters and Enhanced Drivers*. Please see:

- *Windows 2000 on page 35*
- *Windows XP on page 33*

Installing Madge PCMCIA and CardBus Adapters and Enhanced Drivers

The instructions provided in this section detail installing supported Madge PCMCIA and CardBus adapters and enhanced drivers.

Windows NT

To install Madge PCMCIA and CardBus adapters and enhanced drivers on Windows NT:

- 1 Ensure Sniffer Portable software is installed. If it is not installed, install it now.
- 2 If you have a previously installed driver (a previous version of a Sniffer driver or another vendor's driver), you must first uninstall the driver before installing the Sniffer enhanced driver. Remove drivers in Windows NT through the Adapters tab of the Network control panel.
- 3 Shut down the computer.
- 4 Following the manufacturer's instructions, insert the Madge PCMCIA or CardBus adapter card into an available slot in your computer.
- 5 Start the computer.
- 6 Go to Start > Settings > Control Panel.

- 7 Double-click the **Network** icon, then click the **Adapters** tab.
- 8 Click **Add**.
- 9 In the **Select Network Adapter** dialog box, click **Have Disk**.
- 10 In the **Insert Disk** dialog box specify the complete path for the Madge PCMCIA or CardBus adapter enhanced driver.
- 11 Click **OK**.
- 12 In the **Select OEM Option** dialog box, **select Sniffer (Madge) PCMCIA/CardBus Adapter MK2** and click **OK**.
- 13 In the **Setup Message** dialog box, click **OK**.

The Network dialog box appears with the Madge PCMCIA or CardBus adapter installed.
- 14 In the **Network** dialog box, click **Close** to perform the bindings.

The TCP/IP Setup dialog box appears.
- 15 In the Adapter drop down list, select the installed adapter.
- 16 Enter the IP Address and Subnet Mask, and click **OK**.
- 17 Restart the computer.

Windows XP and 2000

For Windows XP and 2000, the instructions for installing the Madge PCMCIA and CardBus adapter and enhanced driver are the same as the instructions for *Installing Madge Adapters and Enhanced Drivers*. Please see:

- *Windows 2000 on page 35*
- *Windows XP on page 33*

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