

## Sniffer Portable

Assuring optimal network performance and security

### Product Overview

Sniffer® Portable is a family of network fault and performance management solutions that enable network professionals to maintain, troubleshoot, fine tune, and expand multitopology and multiprotocol networks. You can configure Sniffer Portable software and its associated options in minutes to begin tracking all the information entering or leaving your network via the Internet gateway and traveling on internal subnets. It supports virtually all Local Area Network (LAN) and Wide Area Network (WAN) topologies, from 10/100 Ethernet to the latest high-speed Asynchronous Transfer Mode (ATM), and Gigabit backbones.

By incorporating Expert analysis capabilities and advanced protocol decodes, Sniffer Portable can determine, pinpoint, and analyze the toughest performance problems automatically. It monitors and analyzes the widest breadth of active network and application protocols in the industry. This list includes many mission-critical applications such as Oracle database, common email applications, and SAP R/3 over topologies such as Half- and Full-Duplex Ethernet, Token Ring, FDDI, WAN T1, HSSI, Packet over SONET, ATM, Gigabit Ethernet, and Wireless LAN 802.11a and 802.11b. Sniffer Portable software runs on desktop, portable, or notebook hardware platforms, and it can utilize advanced, custom hardware components to ensure full line rate capture capabilities.

### Key Features and Benefits

#### Fast Troubleshooting

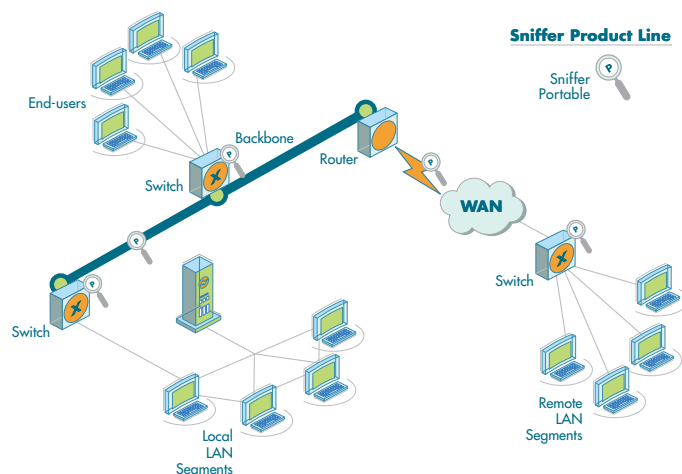
- Supports an intuitive, consistent user interface across various topologies that provides quick data capture and presentation

#### Advanced Real-time Graphs

- Provides a traffic map and matrix of top network conversations
- Displays host tables to immediately identify top-bandwidth users
- Shows protocol distribution information of protocols in use, Internet Protocol (IP) applications running, and Internetwork Packet Exchange (IPX) transport processes utilized

### Accurate Network Planning

- Monitors and displays network usage over time
- Enables day-to-day utilization tracking to effectively plan for change and growth
- Delivers global statistics reports such as segment traffic, errors, size distribution, and utilization
- Supports alarm reports—details and timeline



*Sniffer Portable provides unparalleled network visibility solutions.*

### Sniffer Portable LAN

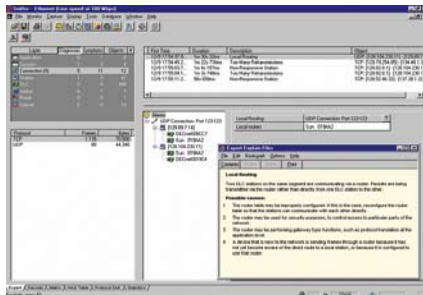
The goal of Sniffer Portable LAN is to keep your LAN running at peak performance levels. The analyzer captures frames, simultaneously building a database of network objects from observed traffic to detect network anomalies. Once Sniffer Portable LAN has isolated, analyzed, and categorized the problem, it alerts you, explains the problem, and recommends corrective action. Sniffer Portable LAN also contains sophisticated Expert analysis capabilities that provide enhanced management automation, more comprehensive problem-solving information, and greater network visibility.

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## Sniffer Portable WAN

Sniffer Portable WAN automatically decodes internetwork bridge/router frame formats and analyzes the LAN protocols encapsulated within WAN transports, helping to optimize WAN bandwidth utilization. It performs real-time monitoring of bridge/router-based leased lines, Frame Relay implementations, and X.25 internetworks to quickly uncover, pinpoint, and resolve problems. Sniffer Portable WAN also troubleshoots legacy systems with SNA, X.25, and other terminal-to-host traffic analysis capabilities.



*Provides immediate network problem identification and automatic experience-based problem correction suggestions.*

Sniffer Portable WAN includes automatic analysis for faster problem resolution by:

- Locating and labeling internetwork problems automatically (e.g., re-transmissions, duplicate IP addresses, high rate of physical Cyclic Redundancy Check (CRC) errors, WAN overload, and Frame Relay congestion)
- Recommending solutions to potential network problems

- Providing detailed bandwidth utilization statistics
- Providing Expert statistics and protocol analysis at all seven OSI layers in real-time, including: TCP/IP, Frame Relay, Novell NetWare5, HTTP, Cisco routing, Microsoft NT, DLSW, HDLC, and Q.931

## Sniffer Portable High-Speed

Sniffer Portable High-Speed helps you troubleshoot and optimize high-speed corporate networks, including client/server applications over cell-based networks. Its monitoring and advanced diagnostic capabilities help prevent network down time and maximize efficiency by observing your high-speed network, confirming connection setups, and automatically decoding ATM transport and LAN protocols.

Sniffer Portable High-Speed improves fault and performance management efficiency by automatically detecting and pinpointing problems, forwarding alarms with event details, and offering solutions on high-speed Gigabit Ethernet and ATM networks. Because Sniffer Portable High-Speed “sees” into all seven OSI layers and the four ATM connection layers, it can automatically identify bottlenecks and protocol violations—even problems such as duplicate addresses and misconfigured routers.

## Sniffer Wireless

Sniffer Wireless provides a comprehensive solution for managing network applications and deployments on wireless LAN 802.11a and 802.11b networks. With its ability to decrypt Wired Equivalent Privacy

(WEP) -based traffic, either precapture or post-capture, Sniffer Wireless gives you unsurpassed troubleshooting flexibility.

## Sniffer Wireless PDA

Sniffer Wireless PDA helps you find problems in the wireless LAN 802.11b environments of your network infrastructure. It is based on a small, personal digital assistant (PDA) running Windows powered PocketPC 2002. You can use Sniffer Wireless PDA to detect security breaches in radio frequencies by displaying all known information and pinpointing rogue and nonsecurity enabled access points. Sniffer Wireless PDA tracks all wireless behavior to determine if the environment is overloaded or performing efficiently. This functionality helps ensure problems are corrected, or the rogue wireless equipment is removed so it no longer poses a security threat to the network.

## Sniffer Portable Value-Added Software Options

### Sniffer Reporter Option

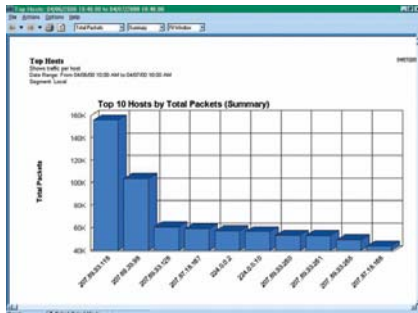
Sniffer Reporter provides valuable insight into network performance. This advanced reporting application allows you to generate graphical reports based on the RMON1/RMON2 and similar data collected by the Sniffer Portable application. From bandwidth usage to potential network degradation, Sniffer Reporter delivers in-depth data to help you plan for future network needs. Available reports for Ethernet and Token Ring include:

- Host table reports (top hosts by traffic, top hosts by protocol)

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- Matrix reports (top conversations)
- Protocol distribution reports (top protocols)
- Global statistics reports (segment traffic, segment errors, segment size distribution, segment utilization)
- Alarm reports (alarm details, alarm timeline)



Host Table report identifies top bandwidth users.

### Sniffer Voice Option

Sniffer Voice is a value-added package that integrates with Sniffer Portable. It provides the necessary insight into voice and video converged traffic. It addresses key issues and ensures successful Voice over IP (VoIP) network rollouts without degrading network response times. Working in conjunction with Sniffer Portable, Sniffer Voice generates alarms critical to voice and/or video over IP implementations via analysis of jitter, packet loss, packet sequencing problems, and latency.

### Sniffer Portable Value-Added Hardware Options

#### Gigabit Ethernet for Sniffer Portable High-Speed Option

Gigabit Ethernet (GbE) is a high-speed topology that provides one Gigabit per

second (Gbps) bandwidth over LANs. Just as demand for higher speeds led to the creation of 100MB Ethernet, the need for even faster connections between servers and switches has paved the way for GbE.

The Gigabit Ethernet Peripheral Component Interconnect (PCI) solution for Sniffer Portable High-Speed provides the following types of statistical information:

- Physical layer—8B/10B decoding
- Network utilization
- Average frame size
- Frames and bytes transmitted
- Good frame count
- Unicast, multicast, and broadcast
- Frame errors, runts, and overruns
- Check sum errors
- Frames transmitted by frame size
- Start/stop time

The Sniffer Portable GBIC Bundle is a portable, notebook-based Gigabit Interface Converter (GBIC) solution that works with the Snifferbook Ultra and is offered in a hardware and software bundle. The Snifferbook Ultra provides dedicated, powerful performance capabilities to maximize network management efficiency for enterprise and field service engineers. This solution provides 512MB of capture buffer space at full line rate. Customers can also purchase the Packet over SONET (PoS) module for use in the Snifferbook Ultra base unit.

### Sniffer Portable Full-Duplex Fast Ethernet PCI Bundle

The Sniffer Portable Full-Duplex (FDX) bundle consists of the FDX PCI adapter, bundled with the Sniffer Portable Analysis Suite software and a Sniffer platform to create an elegant solution for copper and fiber Full-Duplex links. Fiber cable kits are available, and the PCI card can be purchased separately.

The Full-Duplex Ethernet PCI Adapter is a full-length 32-bit PCI printed circuit board with 256MB of onboard memory and two pairs of transceivers (one pair for optical connections and the other for traditional twisted pair connections). It contains two independent Full-Duplex Ethernet channels to capture network traffic. The channels can be used:

- Together to analyze network traffic from both sides of a Full-Duplex Ethernet link (pass-through mode), or
- Separately to capture traffic from up to two Half-Duplex switch ports (end-station mode).

In its pass-through configuration, Sniffer Portable FDX is a completely passive part of the network, contributing no traffic of its own. In end-station mode, Sniffer Portable FDX goes through an initial auto-negotiation sequence to set up its connection to the network. Upon completion, the PCI card still sends periodic signals to the connected port(s) to keep the connection alive.

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### *Snifferbook and Sniffer Portable WAN Option*

Combined with Sniffer Portable WAN, Snifferbook provides a portable, easy-to-use tool for testing, viewing, analyzing, and interpreting end-to-end traffic anywhere on the internetwork. It helps you eliminate blind spots and speed up problem identification and resolution. Sniffer Portable WAN analysis software runs complex network analysis on a standard notebook or subnotebook PC.

Snifferbook bridges the gap between WANs, LANs, and internetworks, providing a “WANs-eye view” into internetworks. Utilizing an Ethernet Cardbus or PCI network interface card (NIC) connection to the PC, Snifferbook supports interchangeable interface modules to connect to T1, E1, or RS/V (V.35, RS-232), or ISDN internetwork links. Advanced hardware supports Bit Error Rate Testing (BERT) to aid in line integrity verification.

### *High-Speed Serial Interface Option*

The High-Speed Serial Interface (HSSI/T3) for Sniffer Portable WAN is a portable fault and performance card. It helps troubleshoot, maintain, and fine-tune the performance of WANs running across high-speed serial interface transports. Sniffer Portable WAN automatically decodes Frame Relay, proprietary bridge/router frame formats, and SMDS DXI. It also analyzes the LAN protocols encapsulated within these WAN transports, which helps optimize WAN bandwidth utilization and minimize network downtime. Additionally, Sniffer Portable WAN troubleshoots legacy protocols on high-speed serial links,

including X.25 and SNA. You can also use Sniffer Portable WAN to analyze client/server environments, with decodes for databases such as Oracle, Sybase, and Microsoft SQL Server. With visibility into the Oracle TNS, Sybase TDS, or Microsoft SQL protocols that establish the client/server communications links, you gain a clear view of the performance relationship between your database application and the network.

### *Sniffer Portable High-Speed ATMbook Option*

The ATMbook for Sniffer Portable High-Speed network monitoring and analysis software is one of the first cost-effective ATM OC-12 network analysis solutions on the market. ATMbook captures and filters every cell in real-time at Full-Duplex OC-3/OC-12 speeds. Both channels on the ATMbook can receive cells at up to OC-12 speeds.

ATM statistics are presented per channel and include:

- Non-idle cells received per channel
- Idle cells received per channel
- Corrected ATM HEC errors
- Uncorrected ATM HEC errors
- Per cent bandwidth utilization (graph)

### **World-Class Training, Consulting, and Support**

Sniffer University is a comprehensive educational resource for building and enhancing network professionals' skills in fault and performance management. Sniffer University has trained over 80,000 network professionals to date. The Sniffer Certified Professional Program provides network professionals industry-recognized accreditation as technical experts in

the network management and protocol analysis disciplines.

Network Associates® Expert Network Services leverages our extensive experience in fault isolation, performance management, and protocol analysis to assist clients during all network growth stages—from planning, design, and product deployment, through on-going management and emergency response. Our seasoned consultants provide critical expertise and an objective perspective to identify, prioritize, and resolve every client's individual performance and availability problems.

Network Associates PrimeSupport® Services offers essential product knowledge and rapid, reliable technical solutions. Over eighty-per cent of our technical staff hold industry certifications and/or technical degrees and five-plus years of experience in the IT industry. You can engage this high level of expertise through our extensive support portfolio, which consists of PrimeSupport KnowledgeCenter Service Portal, Connect, Priority, and Enterprise. PrimeSupport is your key to maximizing processing uptime, revenue generation, and customer satisfaction.

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## Specifications and System Requirements

### Sniffer Portable LAN/WAN/High-Speed

Pentium 400MHz or higher CPU

Min. 128MB RAM (256MB recommended)

Min. 125MB free disk space

CD-ROM drive

Min. 800x600 VGA monitor

Operating system support for all platforms and topologies: Microsoft Windows 98 second edition (SE), Windows NT 4.0 (SP 6a), Windows 2000 (SP 2)

Additional operating system support for LAN and Wireless LAN laptop platforms:

Microsoft Windows XP (SP 1) is also supported for PCMCIA cardbus adapters in these environments only

### Sniffer Reporter

Install over Sniffer Portable version 4.7 and later.

### Sniffer Voice

Sniffer Voice must be installed over Sniffer Portable version 4.7 and later.

### Snifferbook and Sniffer Portable WAN

#### Snifferbook specifications

Size: 2 inches (4.7cm), 12.2 inches (30.5cm), 10.1 inches (25.7cm)

Weight: 4lbs. (1.8kg)

Power supply (AC adapter)

Input: 100-240 VAC, 0.7 A, 50/60Hz  
Output: 19 VDC, 4.0A

### Snifferbook Ultra and Sniffer Portable Packet over SONET

#### Snifferbook Ultra specifications

OC-3c/OC-12c SMF/MMF interfaces,  
512MB (256MB/channel) capture buffer,  
AMD K6 processor

### Sniffer Portable High-Speed ATMbook

#### ATMbook Specifications

Interfaces available: DS3, E3, UTP 155 Mbps, OC-3 MMF and SMF, OC-12 MMF and SMF  
Input/output: Utilizes SC Connectors  
Onboard capture buffer: 64MB (32MB per channel)

ATMbook Sniffer Portable platform:  
Windows NT 4.0 (SP 6a) and  
Windows 2000 laptop environments

### Gigabit Ethernet for Sniffer Portable High-Speed

Gigabit Ethernet network analyzer card  
Intel i960RP, 1000BaseSX, or  
1000BaseLX interfaces

Input/output: Utilizes SC Connectors,  
external trigger input, external  
trigger output

Trace memory: 288MB  
(144MB per channel)

Capture rate:

Channel A: 1.25Gbps, channel B:  
1.25Gbps

#### Platform requirements

BIOS supporting PCI-to-PCI bridge, version 2.1, PNP 1.0a, 3.3V power supply to PCI bus (or external 3.3V voltage regulator card), one full-length PCI slot (plus one half-length ISA slot, if external 3.3V regulator card required)

#### Sniffer Wireless

##### Driver Support and Integration

Sniffer Wireless integrates with industry leading manufacturers.

Support for 802.11a includes:

- Proxim Harmony Cardbus

##### Support for 802.11b includes:

- Symbol Technologies Spectrum24 Model 4121
- Cisco Systems Aironet 340/350
- Agere Systems ORiNOCO
- Enterasys RoamAbout

All of these adapters can only run in promiscuous or end-station mode at any given time.

All Network Associates products are backed by our PrimeSupport program and Network Associates Laboratories. Tailored to fit your company's needs, PrimeSupport service offers essential product knowledge and rapid, reliable technical solutions to keep you up and running. Network Associates Laboratories, a world leader in information systems and security, is your guarantee of the ongoing development and refinement of all our technologies.

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