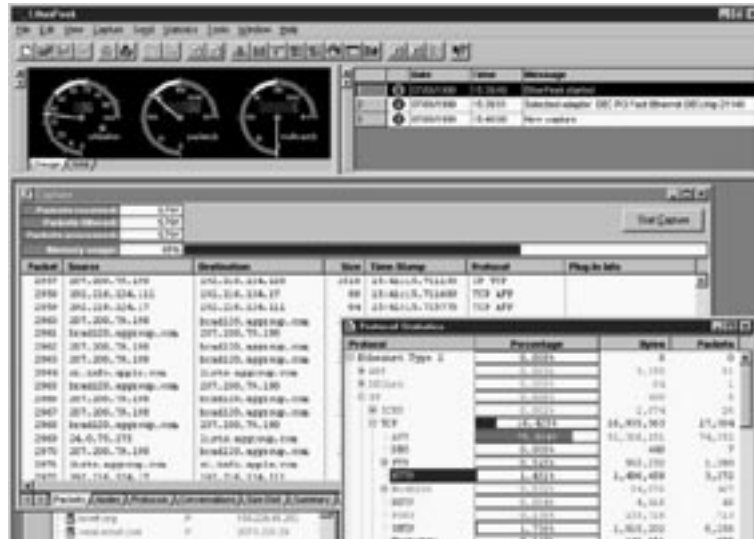# BLACK BOX®
NETWORK SERVICES

EtherPeek NX

Key Features

▶ Powerful

▶ Affordable

▶ Easy-To-Use

▶ Detect device failures ad faulty software

▶ Identify routing and addressing problems

▶ Keep track of internet usage

Introducing EtherPeek NX™
EtherPeek NX brings the power of NetSense Expert Analysis to WildPackets' award-winning EtherPeek technology.
As networks converge media and new technologies into increasingly diverse and complex infrastructures, IT Professionals look to Expert Systems to sort through, analyze, diagnose, and isolate network data. Expert Systems need to be precise in pinpointing problems, relevant for current networks and topologies, able to accurately detect real symptoms and diagnose real problems.
EtherPeek NX has been designed to excel at all of these requirements, incorporating industry-leading expert technology to provide precise, contemporary analysis of today's complex networks. Combining EtherPeek's familiar feature set and award-winning UI with heuristics developed by experienced packet analysis professionals, WildPackets delivers another powerful, affordable tool to help you manage your network.

Real-time Expert Analysis
EtherPeek NX is the fi rst and only

protocol analyzer to offer both expert diagnostics and frame decoding in real-time, during capture. The Expert view, pictured above, provides expert analysis of latency, throughput, and over three dozen network problems in a conversation-centered view of traffi c. Many of the test elements have user-defined settings and thresholds, allowing you to fi ne-tune the Expert System to precisely fi t your network.

Expert System developed by networking experts
The Expert System represented by NX has been created with the assistance of network engineers, professional consultants and high-level packet analysis instructors with many collective years of experience and training. The intelligence brought to bear on NX's expert system provides you with real-time, realistic indications of traffi c conditions and problems on your network, rendered in an intuitive display.

Expert Mapping
The EtherPeek NX Peer Map is drawn as a vertically-oriented ellipse, able to grow to the size necessary to show all communicating nodes within your

network. Reading the peer map is easy: the thicker the line between nodes, the greater the traffi c; the bigger the dot, the more traffic through that node. The number of nodes displayed can also be limited to the busiest and/or active nodes, or to any EtherPeek NX fi lters that may be in use. Protocols in use by nodes show up in a protocol legend at the side of the peer map. Nodes can be displayed by physical, IP, or IPX address; selecting the type of address also determines which protocol stacks are displayed in the map and in the protocol legend. Nodes can also be hidden to increase focus on a few problem nodes.

Application level analysis
The EtherPeek NX Expert ProblemFinder, shown above, analyzes application layer client/server problems including busy networks and servers, ineffi cient clients, low throughput and latency. In order to quickly assess overall network performance, and easily identify application problems or client/server communications problems, EtherPeek NX calculates the send/receive statistics for all stations, including averages and ratios. Each

individual conversation is analyzed independently for response time (latency) and throughput.

Custom Expert Settings
Each of the thirty-nine Expert ProblemFinder settings in NX can be enabled or disabled at will. Many of the settings have additional metrics that can be invoked, such as an absolute threshold or sensitivity option. The Threshold Assistant™ helps to easily determine settings that are right for your network environment and the Expert Memory™ allows you to set the amount of memory available to Expert Analysis functions.The Expert Problem Finder also includes information describing the networks or application issues at hand, possible causes, and possible remedies.

Multiple, simultaneous capture windows
As with all WildPackets' "Peek" products, EtherPeek NX has the ability to open multiple live capture windows simultaneously. This means that new capture windows can be created in real-time to focus on specific traffic elements discovered in an overall traffic

capture window. In addition, EtherPeek NX's NetSense Technology provides independent expert and Peer Map analysis of all open capture windows. You can also easily replay existing trace files for NX analysis. This is a great way for network engineers to examine shared traces…even those from other protocol analyzers!

Analyze network trends
Sophisticated graphing and trending features allow collecting, displaying, saving and analyzing any node, protocol, network or summary statistic available over a user-specified period of time. View trends through a variety of graph options from within the program. Output data in enhanced XML format for web access, or save statistics in tab-delimited form that can be exported to an external charting application.

Suspects detected, problems diagnosed
The advanced alarm threshold notification options in EtherPeek NX include over 50 real-time or post-capture conditions tracked by the alarm notification system. These include bandwidth usage and error rate as well as specific numeric assessments such as, "How many times per second were ARP requests unresolved?" The advanced alarm threshold notification system comes

pre-configured (with user-configuration easily performed) to identify not only the typical metrics and sophisticated threshold events, but to assess the significance of the expert system output as well. You will be notified (in a log, via email, or on your pager) that a Suspect Condition or a Problem Condition is occurring.

Features and benefits

Expert Analysis — Provides Automated Problem Identification on your network. Evaluates and analyzes all 7 layers of OSI model, separates packets into independent conversations and displays them in an intuitive tree structure, analyzes device by device to isolate problem behavior, describes behaviors indicative of network, client, server, router, or infrastructure problems.

Expert Problem — Finder Allows user to customize behavior of expert system in order to tailor it to the characteristics of his or her own network. ProblemFinder also provides descriptions, causes, and remedies for each of the problem conditions the expert system encounters.

Threshold Assistant — Allows the user to quickly adjust problem solver values by choosing network speed, and using built-in real world networking experience algorithms.

Peer Map — Provides a visual display of all conversations seen on the network, allowing the user to

quickly breakdown network traffic, identify top talkers, and drill down into protocols and packet transmission statistics.

Multiple capture windows — Each capture window can have its own filters, expert analysis, peer map, etc. Useful for monitoring different application servers, comparing traces for client and server, and starting new captures to isolate problem devices while maintaining network capture buffer simultaneously.

Enhanced Alarms — EP NX provides over 100 real-time conditions tracked by the alarm system. NX has added the ability to set 3 conditions - Suspect, Problem, and Resolved - providing finer control over when a particular condition should be considered informational, minor, major, or severe.

Analysis Modules — EP NX was designed from the ground to be both extensible and modular. This allows the user to actually modify the behavior of EP NX, in order to, for instance, add

new analysis capabilities for specific protocols and applications, optimize application performance, and disable undesired modules.
"Select Related" filtering This exclusive feature provides a one-click means of extracting the precise packets the user is looking for. The user can quickly select the packets corresponding to specific hosts, protocols, conversations, and even expert problem reports.

Standard and Extensible Protocol Decoders — EtherPeek NX can accurately decode hundreds of network, transport, application and device control protocols, displaying both the commands and their meaning in English. With these clearly presented displays of packet contents, a user can more readily troubleshoot a network, track down a security breach, or simply gain a better knowledge of protocols and network services. Standard protocols can be customized or extended with the Decoder SDK that accompanies every NX purchase.

Customizable, multi-view display — Network engineers work differently. EtherPeek NX provides the user with the ability to customize the display to fit his or her preferences.

Summary Statistics — This window provides a real time tally of all the statistics collected by EP NX. This allows the user to quickly see and graph everything that is happening on the network, including the output of the Expert analysis.

Enhanced Report Generation — HTML and XML output provides the user a real-time view of global or capture-specific statistics. Useful for remote monitoring and management reports.

Developer's Kit — Includes a "plug-in wizard" to enable you to create custom analysis modules and the tools necessary to develop specialized decodes.

Specifications

System Requirements

EtherPeek 4.x for Windows —
10 Mbit Ethernet Requirements:
 Pentium 166 MHz or higher
 Windows 95/98/ NT 4.0/2000 (SP3 or later)
 64 MB RAM
 NDIS 3 Compatible NIC
 DEC 21X4X Compatible NIC for Error Packet Capture
 Color Monitor Required

100 Mbit Ethernet:
 Pentium II 400 Mhz
 128 MB RAM

EtherPeek for Macintosh OS —
PCI-based Power Macintosh
32Mb Free RAM
System 8.0 or higher
EtherPeek Supported Ethernet Interface

About WildPackets —
WildPackets develops and markets high-performance tools that deliver real-time, strategic information about an organization's network and Internet presence. Our awardwinning products include:

- AiroPeek Wireless protocol analyzer
- EtherPeek Ethernet analyzer
- EtherHelp FREE, distributed remote capture application

▼ The EtherPeek Family of Products

EtherPeek Core Product: Features
- Multiple Capture Windows
- Thousands of protocol & sub-protocol decoders
- Powerful, real-time & post-capture event trigger & filtering
- Grouped name table
- ProtoSpecs™ protocol layer hierarchical break outs with definitions
- Simple and advanced filtering
- Extensive notification capabilities including visual, audio, pager, speech and email
- Modular plug-in architecture
- User-definable filters, decodes & plug-ins
- Generate traffic — Send/alter packet function

- Real-time HTML and enhanced XML traffic statistics report generation
- Summary statistics
- History statisitcs

EtherPeek Core Product: Benefits
- Capture and view conversations, node and protocol activity in separate buffers simultaneously.
- Interpret data for packets from ALL major protocol suites.
- Locate & remedy network problems quickly by limiting packet captures to data of interest.
- Work with familiar, identifiable names for easy packet & device analysis.
- Facilitate protocol filtering, monitoring & analysis.
- Filter packets during or after capture. OR,AND, and NOT support in filter creation and implementation.

- Take proactive measures — Identify precursors to major problems.
- Expand on EtherPeek's built-in functionality.
- Create custom filters & decodes for use with proprietary protocols; analyze packet contents during or after capture.

- Test varying loads & device reactions to specific packet types.
- Monitor live network traffic from any location with your Web browser.
- Baseline key network data at requested intervals for a comparative look at network performance.
- See performance statistics for your network, including: utilization, packets/second or bytes/second for a specified time interval.

▼ EtherPeek Product Extensions

EtherHelp: Powerful, Distributed Packet Capture
EtherHelp extends EtherPeek's powerful packet capture and filtering capabilities to multiple LAN/WAN local and remote network segments.

Plug-Ins Provide Expert Analysis Capabilities
External plug-in modules help you: find and log duplicate IP address use, verify checksums, log Web usage and FTP downloads. EtherPeek includes a Plug-in SDK, so anyone with programming experience can extend the capabilities of the program by writing their own custom add-in enhancements.

WebStats: Intelligent website management tool
This flexible, highly configurable anal separate from the program and extensible. A Decoder SDK is included with EtherPeek for any user with programming experience to customize or add their own decoders.

iNetTools: A HandyTest Tool Suite
Add iNetTools for Internet and IP-based networks to EtherPeek's Tool menu (WIN version ONLY) during EtherPeek's installation process to get ready access to a variety of testing tools, including Ping, Trace Route, DNS Lookup and more!

ProConvert: Trace File Converter
ProConvert™ supports two-way LAN packet capture file inter-change between the "Peeks" and over 18 different protocol analyzers and packet capture formats.

▼ Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

On the Phone — no charge, answer calls in less than 20 secounds, find the right product with our technical experts.
On-site — superior design and engineering, Certified installations end-to-end service.

On-line — receive techincal knowledge on-line, including technology overviews, BLACK BOX Explains and the Knowledge Box.

Most comprehensive TECHNICAL SUPPORT — our best Product! Free hotline TECH SUPPORT!

The world's best customer service — Custom design services and products, the best warranties, money-saving discount programs.

Black Box exclusives — Certification Plus. Guaranted-for-life products and services.

▼ Ordering information

ITEM	CODE
EtherPeek NX incl. 12 Month Maintenance Level 1	VSSEL302NX1
EtherPeek NX incl. 24 Month Maintenance Level 1	VSSEL302NX2