



# OmniPeek® Network Analyzer

## The Challenge

Enterprises and service providers depend on reliable network performance. Configuration errors, network faults, and security attacks can jeopardize operations—and the corporate bottom line. To keep networks performing optimally, engineers need to be able to continuously monitor their networks and troubleshoot problems wherever they occur, as quickly as possible. They need real-time analysis for every type of network segment—Ethernet, 1/10/40 Gigabit, 802.11, and voice and video over IP—and for every level of network traffic, including spikes in usage. These analysis capabilities must be available 24/7 in an easy-to-deploy, easy-to-use solution.

## The Solution: OmniPeek® Network Analyzer

Serving a dual role as both a portable network analysis solution and as a software console for OmniEngine™ software and appliances, OmniPeek® offers an intuitive, easy-to-use graphical interface that engineers can use to rapidly analyze and troubleshoot enterprise networks. OmniPeek provides centralized Expert analysis for all networks under management. Using OmniPeek network analyzer's intuitive user interface and "top-down" approach to visualizing network conditions, network engineers can quickly analyze faults from multiple network segments, drill down through multiple layers of analysis, and pinpoint problems that need correction.

Using OmniPeek, network engineers can:

- Analyze traffic from any local network segment, including Ethernet, 1/10 Gigabit, 802.11, and voice and video over IP, as well as any network segment configured with OmniEngine software probes or Omnipliance® network analysis and recorder appliances.
- Capture and analyze 802.11n and 802.11ac wireless traffic from the most advanced devices currently available.
- Analyze and troubleshoot both data and multimedia traffic using a single product.
- Monitor networks, application performance, and multimedia in separate high-level dashboards, and drill down to see which traffic characteristics are affecting performance.
- Interactively monitor key network statistics in real-time, including flows, latency, Expert analysis, and files to quickly find issues using the Compass interactive dashboard, then instantly drill down to detailed analysis.
- Capture and analyze data from multiple local network adapters, multiple distributed OmniEngine software probes, multiple network analysis and recorder appliances and Omnipliance appliances, or any combination of local and remote data.
- Visualize end-to-end, hop-by-hop traffic changes through correlated analysis from multiple OmniEngine software probes or appliances using multi-segment analysis.
- Monitor voice and video over IP traffic in real-time including high-level multimedia



**Total Network Visibility**



**See Invisible Virtual Network Traffic**

## WildPackets solutions enable businesses to

- Gain unprecedented visibility into networks and applications
- Accelerate find-to-fix times
- Discover and close network security gaps
- Maximize ROI on existing networks and applications
- Increase IT efficiency and responsiveness
- Reduce costs associated with network downtime and service degradation
- Reduce IT labor costs
- Increase end user productivity

summary statistics, and comprehensive signaling and media analyses.

- Gain complete visibility into voice and video over IP traffic with real-time call data records (CDR).
- Leverage your existing wireless network infrastructure by turning managed access points from Cisco or Aruba into packet capture devices and collect data from multiple channels simultaneously.
- Decrypt WEP, WPA/PSK, WPA2 Personal, and SSL packets.
- Rely on real-time Expert analysis to do the heavy lifting, performing analysis of all network traffic and reporting Expert events as they occur.
- Receive alerts when specific Expert events occur, or when configured network policies are violated.
- Change filters on the fly without having to stop and restart network traffic captures.
- View packet-based analytics by conversation pair, instantly locating network events.
- View web traffic, the most common data type on the network, in conversational flows based on client, server, web pages, or web requests.
- Monitor MPLS and VLAN networks.

## Unique Flexibility

Of all standalone network analysis products available today, only OmniPeek enables network engineers to monitor multiple parts of the network simultaneously—an important capability when engineers know there is a problem but do not know where it is.

## Visual Expert

The Visual Expert answers the question “Who is talking to who?” by providing comprehensive visual data about network, media and application traffic, along with expert diagnoses of common and not-so-common network problems. The Visual Expert makes it easier to understand what is happening on the network and how to remedy problems by providing a “top-down” view of network activity.

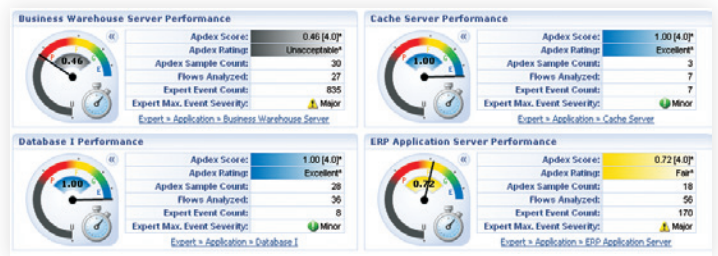
Visual Expert includes Packet Visualizer, payload reconstruction, a wide range of conversation-oriented graphs, optimization tuning by playing “what if” with key network parameters, packet-by-packet comparison between multiple saved capture files—very useful in comparing the traffic from the wireless and wired side of an access point, and a detailed summary panel.

## Expert Analysis

OmniPeek displays Expert analysis diagnoses by conversation pair, so you can instantly identify where problems are occurring on the network.

## Multi-Segment Analysis

Isolate sources of network latency and packet loss, as well as tracking network addressing changes such as TTL and NAT, by consolidating and correlating analysis data from multiple



The Application Performance dashboard displays user satisfaction scores for the applications on your network.



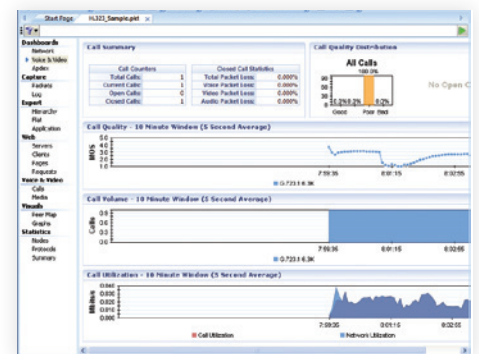
Multi-segment analysis correlates and analyzes network traffic across multiple network hops.

OmniEngine software probes and appliances. Deep integration means that multi-segment analysis can be performed as easily on real-time traffic as it can on pre-captured files. Reduce your troubleshooting time by identifying the problem within your network based on real data, not just device stats.

## Voice and Video Analysis

To deploy and maintain a successful voice and video over IP implementation, you need to be able to analyze and troubleshoot media traffic and the network the media traffic is running on, simultaneously. You need to be able to understand how other applications are affecting media traffic—and vice versa.

OmniPeek Enterprise provides users with the visibility and analysis they need in order to keep voice and video applications and non-media applications running optimally on the network. Users gain access to the entire voice and video over IP network in a single view, including a wealth of detailed call quality statistics, graphical representations of the media traffic and detailed diagnostic information. Specific voice and video media, signaling, call playback, and call data record (CDR) capabilities are also included.



The voice and video dashboard provides visibility into the entire VoIP and video network on a single view.

## End-User Experience

OmniPeek® Remote Assistant is a small, easy-to-use application that enables help desk and technical support personnel to capture network data directly on end-user devices. The simple user experience reduces user confusion, allowing non-technical users to collect data, while providing valuable troubleshooting information. OmniPeek Remote Assistant capture files are protected using public/private key encryption, so the help desk can see what the user sees, but no one else can.

## MPLS and VLAN Analyses

For organizations adopting MPLS and VLAN, the OmniPeek network analyzer captures MPLS and VLAN traffic and provides important statistics, such as total packets and total bytes per MPLS/VLAN. All MPLS/VLAN statistics can be graphed over time providing a detailed view of the MPLS/VLAN network to the user. Alarms can be set on these statistics to notify the administrator as soon as a problem occurs in the network.

## On-the-Fly Filters

You should not have to stop your analysis to change what you are looking at. OmniPeek enables you to create filters and apply them immediately. The WildPackets® “select related” feature selects the packets relevant to a particular node, protocol, conversation, or Expert diagnosis, with a simple right click of the mouse. Advanced filters use either visual logic or tcpdump/bpf format to isolate suspect traffic into a new tab, allowing quick analysis without disrupting your troubleshooting. Save your filters for future use to create site-specific tools for you and your team. Features like this significantly reduce the time needed to find and fix problems. Similar operations often take a dozen or more steps in other analyzers.

## Alarms and Notifications

Using its advanced alarms and notifications, OmniPeek uncovers hard-to-diagnose network problems and notifies users of issues immediately. OmniPeek alarms query a specified monitor statistics function once per second, testing for user-specified problem and resolution conditions. Upon matching any of these tests, the alarm function sends a notification of user-specified severity. The level of severity can be set to indicate the importance of the notification. Notifications can be sent as log, email, execute, sound, syslog, and SNMP trap.

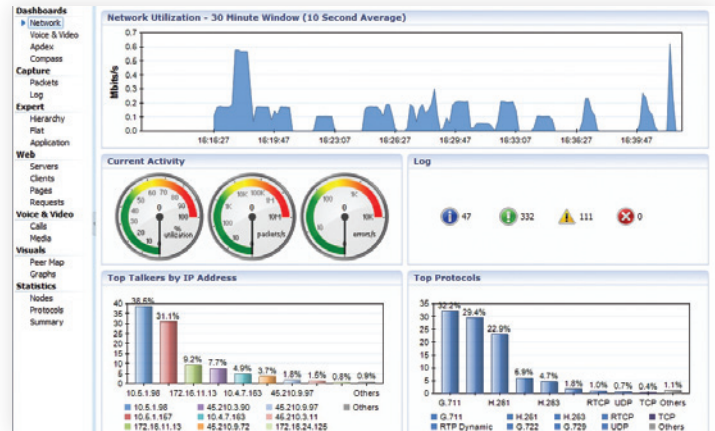
## Global Real-Time Troubleshooting

OmniPeek extends real-time troubleshooting to network segments around the world, delivering Expert analysis, detailed node, protocol, and network summary statistics, and even packet decoding, on multiple segments, by multiple users, in real time. From one application, a network engineer can cost-effectively follow the packet path, troubleshoot, and locally view OmniEngine Expert analyses and other detailed statistics from OmniEngine software probes or Omnipliance network analysis and recorder appliances down the hall, across the country, or around the globe.

## Top-Down View

OmniPeek provides a high-level view of network traffic, application performance, and multimedia using its comprehensive dashboard views. Dashboards display important data that every network engineer needs to know about the network without spending lots of time analyzing the captured data.

With OmniPeek, you can also drill down and see which nodes your top talkers are talking to. Click again and see what protocols and subprotocols are in use. IT staff of all levels of technical ability can



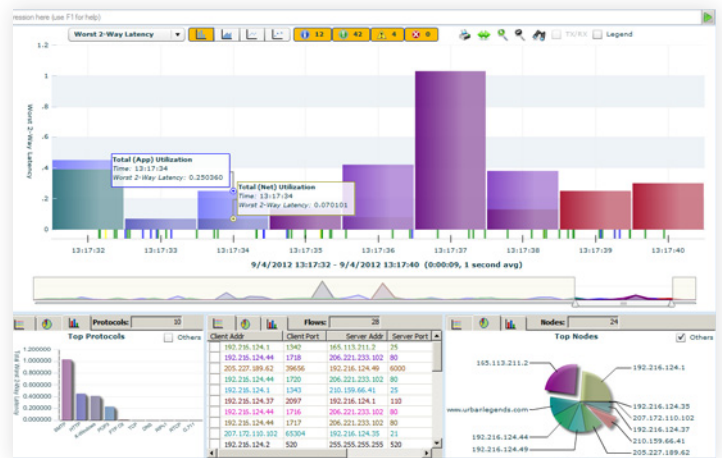
Dashboards provide visibility into all network traffic with drill-down capability to packets.

view this information instantly, anywhere on the network. OmniPeek also provides a wide range of reports in various output formats to keep executives informed of overall network performance.

## Interactive Real-Time and Post-Capture Analysis

The OmniPeek Compass dashboard provides an interactive view of key network statistics, which can be graphed, dynamically correlated, and reported on. With its unique ability to aggregate traffic from multiple segments, Compass provides network engineers with more visibility and insight into their networks.

Compass provides interactive visualization of traffic by packets, bandwidth, and latency, with tight integration to Expert events,



The Compass interactive dashboard dynamically correlates data so users can quickly isolate problem areas.

for easy and instant investigation into the behavior of nodes, protocols, and individual flows. With a single click, Compass

views can even be converted into filters and reports.

## Network Coverage

With the Ethernet, 1/10 Gigabit, 802.11, and voice and video over IP capabilities, you can now effectively monitor and troubleshoot services running on your entire network. Using the same solution for troubleshooting wired and wireless networks reduces the total cost of ownership, and illuminates network problems which would otherwise be difficult to detect.

## OmniPeek Basic

OmniPeek Basic is a full-featured, stand-alone network analysis tool. This product is ideal for IT help desk or technical support organizations who collect network data to be analyzed by others, or for small businesses or remote offices where network troubleshooting is confined to a small number of interfaces, with no high-speed (10G or Gigabit) links and a limited number of employees on the network. OmniPeek Basic collects network data from a single interface and provides basic analysis for occasional troubleshooting.

## OmniPeek Professional

OmniPeek Professional expands the capabilities of OmniPeek Basic, extending its reach to all small businesses and corporate workgroups, regardless of the size of the network or the number of employees. OmniPeek Professional provides support for multiple network interfaces while still supporting up to two OmniEngines acting as both a full-featured network analyzer and a console for remote network analysis. There is also no limit to the number of network flows that can be analyzed, so groups of any size can be supported.

## OmniPeek Enterprise

OmniPeek Enterprise is WildPackets' flagship product. It combines all of the features of the WildPackets distributed network analysis solutions in one product, including support for local captures from multiple interfaces and connections to an unlimited number of distributed OmniEngine software probes and Omnipliance network analysis and recorder appliances. It supports data collection from any network topology, including 10G and Gigabit networks, and local matrix switches, along with correlated visualization through multi-segment analysis. OmniPeek Enterprise also provides advanced voice and video over IP functionality including signaling and media analyses of voice and video, VoIP playback, voice and video Expert analysis, Visual Expert, and more. OmniPeek Enterprise is ideal for IT organizations responsible for network analysis and network service level agreements (SLAs). A license of OmniPeek Enterprise should be considered for each location that will be supported by a network engineering professional.

## OmniPeek Connect

OmniPeek Connect manages an organization's OmniEngine software probes, and provides all the console capabilities of OmniPeek Enterprise. OmniPeek Connect is ideal for Network

Operations Center (NOC) deployments as it can monitor distributed analysis solutions at multiple remote locations, where there is no need for local captures at the console location.

## WildPackets Distributed Network Analysis

WildPackets gives network engineers real-time visibility into every part of the network—simultaneously from a single interface—including Ethernet, 1/10/40 Gigabit, 802.11, and voice and video over IP. Using OmniPeek's local capture capabilities, centralized console, distributed OmniEngine intelligent software probes, Omnipliance network analysis and recorder appliances, and Expert analysis, engineers can monitor their entire network, rapidly troubleshoot faults, and fix problems to maximize network uptime and user satisfaction.

## About WildPackets, Inc.

WildPackets develops hardware and software solutions that drive network performance, enabling organizations of all sizes to analyze, troubleshoot, optimize, and secure their wired and wireless networks. WildPackets products are sold in over 60 countries and deployed in all industrial sectors. Customers include Boeing, Chrysler, Motorola, Nationwide, and over 80 percent of the Fortune 1000. WildPackets is a Cisco Technical Development Partner (CTDP). For more information, visit [www.wildpackets.com](http://www.wildpackets.com).



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