OmniPeek® Enterprise

OmniPeek Enterprise v6.0 Technical Specifications

Supported Networks

OmniPeek Enterprise can analyze traffic on Ethernet, Fast Ethernet, Gigabit Ethernet, 10GbE, or Wireless networks.

Ethernet and Gigabit

- IEEE 802.3
- Ethernet Type 2
- Data Rates: 10, 100 and 1000 Mbps.

Wireless

- Wireless 802.11 a/b/g/n
  - 802.11 a Data Rates: 6, 9, 12,18, 24, 36, 48, 54, 72, 96, 108Mbps
  - 802.11 b Data Rates: 1, 2, 5.5, and 11 Mbps
  - 802.11 g Data Rates: 5.5, 6, 9, 11, 12, 18, 22, 24, 33, 36, 48, 54 Mbps

Supported Network Adapters

Ethernet Cards

OmniPeek will run with any NDIS 3 or higher compatible Ethernet promiscuous mode network adapter. Almost all Ethernet adapters on the market today meet this requirement. For example, we are compatible with adapters from 3Com, Intel, Xircom, SMC, and many others.

OmniAdapters

The OmniAdapter is a high performance network analyzer card that supports up to 2 full-duplex or 4 half-duplex connections providing advanced monitoring and troubleshooting of Gigabit networks.

OmniAdapter is a four-port, PCI-E network analyzer card available in the following configurations:

- Four SFP cages
- Four SFP RJ45 ports
- Two SFP cages and two RJ45 ports

OmniAdapters are supported on both Windows and Linux operating systems.

OmniAdapter 10G

WildPackets' OmniAdapter 10G is a 2-port, PCI-E, 10 Gigabit Network Analyzer Card with 1x10 Gbit/s optical interfaces that has been optimized for monitoring and troubleshooting traffic on 10 Gigabit Ethernet network. The OmniAdapter 10G provides hardware accelerated packet tracing and configurable filtering together with high precision timestamping. The network adapter is available with 1x850nm MFF XFP or; 1x1310nm SMF XFP optical transceivers with LC connectors.

OmniAdapters 10G are supported on bothWindows and Linux operating systems.

Other Gigabit and 10G Network Adapters

- Intel® PRO/1000 Quad Port Server Adapter
- Intel® PRO/10GbE Server Adapter

Wireless LAN Adapter

For wireless packet capture, OmniPeek requires the installation of a special NDIS driver. For more information and to download wireless drivers, please visit: http://www.wildpackets.com/support/downloads/drivers

Voice and Video over IP

Troubleshooting Tools

Jitter software resolution: ±1 msec

Packet delay variation resolution: ±1%

Packet loss resolution: ±1%

MOS (Mean Opinion Score) resolution: ±0.001

General Statistics

- Average jitter
- Packet loss

Voice

- MOS Score (Mos-LQ, MOS-CQ, MOS-PQ, MOS-Nom)
- R Factor (Listening, Conversational, G.107, Nominal)

Video

- VS-AQ: Video Service Audio Quality
- VS-MQ: Video Service Multimedia Quality
- VS-PQ: Video Service Picture Quality.
- VS-TQ: Video Service Transmission Quality.
- MOS Score (MOS-A, MOS-AV, MOS-MQ, MOS-V)

Protocols and Codecs

OmniPeek decodes numerous voice and video specific protocols and sub-protocols. Below is a list of the supported higher-level protocols and codecs.

Protocols

Avaya CCMS, SIP, SCCP, RTSP, MGCP, H.323

Codecs

Voice: G.711 u-law, G.711 a-law, G.722 64k, G.723.1 5.3K, G.723.1 6.3K, G.726, G.729a, G.728, GIPS iLBC, GSM 6.10

Video: H.261, H.263, H.264.

Audio: MPEG-4 AAC

Audio Compression Formats Supported for Playback

G.711 a-law, G.711 u-law, G.723.1 5.3K, G.723.1 6.3K, G.729a, G.726, G.728

Supported Operating Systems and Browser

Windows Vista (SP1), Windows XP Professional (SP3), Windows Server 2003 (SP2), or Windows 7

All operating systems require Internet Explorer 7 and Microsoft .NET Framework 2.0

Minimum System Requirements

OmniPeek supports most rack mount, desktop and portable computers as long as the basic system requirements needed to run the operating systems are met. Depending on traffic and the particular usage of OmniPeek, the requirements may be substantially higher.

Recommended System

P4 2.4 GHz Processor; 4 GB RAM; 20 GB Available HD Space

Heavier Usage Recommendations

Factors that contribute towards superior performance include, high speed CPU,

dual CPUs, high performance disk storage subsystem (RAID 0), and as much additional hard disk space as is required to save the trace files that you plan to manage.

Error Packet Capture

OmniPeek has the ability to capture error packets on the network. These errors include: Runt, Oversize, Frame Alignment, and CRC Errors. To capture errors on 10 Gigabit segments, WildPackets OmniAdapter 10G must be used. To capture errors on Gigabit segments, you must use the WildPackets OmniAdapter. To capture errors on Wireless, supported wireless cards with a special WildPackets driver must be installed. To capture errors on Ethernet or Fast Ethernet, you must use one of the supported cards and a special WildPackets driver.

Protocols

OmniPeek decodes numerous protocols and sub-protocols. A list of higher level protocols can be found at: http://www.wildpackets.com/support/omni/omnipeek_enterprise/decodes

GPS

OmniPeek can communicate with a GPS receiver using a separate utility, the WildPackets GPS Daemon, as the interface between itself and the GPS receiver. OmniPeek can include the data provided by a GPS receiver in Capture windows. For each packet, optional columns in the Packets view can show the GPS Time, Latitude, Longitude, Altitude, and Speed most recently reported by the connected GPS receiver. The daemon supports GPS receivers following the NMEA (National Marine Equipment Association) 0183 standard which provide data in recognized GPS sentences (comma separated ASCII data strings) in the GPRMC and GPGGA formats. Devices following NMEA 0183 must be connected using an RS-232 serial port (COM port).

WildPackets

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