Network Analyst's Glossary

***Note**: This Glossary defines terms as they relate to network analysis and Wireshark functionality.*

6to4 traffic—6to4 traffic contains IPv6 packets embedded inside IPv4 headers. These packets can be routed through an IPv4 network to a target IPv6 host. Apply a display filter for `ip and ipv6` to detect traffic that contains both protocols.

ACK—Short for Acknowledgement, this term is used to refer to the packets that are sent to acknowledge receipt of some packet on a TCP connection. For example, a handshake packet (SYN) containing an initial sequence number is acknowledged with SYN/ACK. A data packet would also be acknowledged.

AirPcap—This specialized wireless adapter was originally created by CACE Technologies (now owned by Riverbed) to capture wireless network traffic. Designed to work on Windows hosts, this adapter can capture traffic in promiscuous mode (capture traffic sent to all target hardware addresses, not just the local hardware address) and monitor mode (capture traffic on all wireless networks by not joining any wireless network). For more information, visit *www.riverbed.com*.

Annotations—As of Wireshark 1.8, annotations, or comments, can be added to an entire trace file or to individual packets. Trace file annotations can be seen by clicking on the **Annotation** button on the Status Bar or by selecting **Statistics | Summary**. Packet annotations can be seen above the Frame section of a packet in the Packet Details pane or by opening the **Expert Infos** window and selecting the **Packet Comments** tab. The display filter `comment` will show you all packets that contain comments. Add this as a column to read all comments in the Packet List pane.

Apply as Filter—After right-clicking on a field, conversation, endpoint, or protocol/application you can apply a display filter immediately using this option.

ARP (Address Resolution Protocol)—ARP packets are sent to determine if someone is using a particular IP address on a network (gratuitous ARP) or to locate a local host's hardware address (ARP requests/replies). Both the capture and display filters for ARP are simply `arp`.

ASCII (American Standard Code for Information Interchange)–ASCII is a character encoding mechanism seen in the Packet Bytes pane. When you highlight a text field in the Packet Details pane, the hex and ASCII location of that field is highlighted in the Packet Bytes pane.