Advanced Packet Analysis with Wireshark Analyzer Training (APAW) <u>Course Contents</u>

Switched Ethernet analysis

- Spanning Tree operation and Spanning Tree analysis
- Analyzing VLANs, VLAN-Tagging

TCP/IP analysis of the network layer

- IP addressing
- Typical IP scenarios
- IP options
- ICMP, ARP and DHCP

TCP/IP analysis of the transport layer

- TCP functions
- Session Setup, Data Transfer and Session Teardown
- Window Mechanism and Window optimization
- TCP options (SACK, Window Scaling) and TCP timers
- UDP functions

Analyzing TCP/IP with Wireshark

- Wireshark preferences for advanced TCP/IP analysis
- Typical TCP/IP related problems
- Wireshark Expert Info messages and their meanings

TCP/IP applications

- HTTP
- FTP
- DNS
- SSL