

# Advanced Packet Analysis with Wireshark Analyzer (APAW)

#### ID APAW Price 2,390.— €excl. tax) Duration 3 days

Our Wireshark workshops are now available with new content and in-depth exercises!

More info can be found under "Course Outline".

#### Who should attend

Network administrators and all other technical staff responsible for the planning, implementation and ensuring high performance operation of their data networks.

#### Prerequisites

Course participants should be familiar with the basic concepts of network analysis, the operation of Wireshark, and the creation of display and capture filters. This content is taught in the <u>Packet</u> <u>Analysis with Wireshark Analyzer (PAW)</u> course.

#### **Course Objectives**

This course provides participants with the knowledge necessary for detailed analysis and troubleshooting of typical network environments using Wireshark Analyzer. The main focus is on the analysis of TCP/IP networks and TCP/IP-based applications.

#### **Course Content**

- Switched Ethernet analysis
- TCP/IP analysis of the network layer
- TCP/IP analysis of the transport layer
- Analysis of TCP/IP with Wireshark
- TCP/IP applications

#### **Detailed Course Outline**

#### **Switched Ethernet Analysis**

- Ethernet Analysis
- VLANs and VLAN tagging

#### TCP/IP analysis of the network layer

- IP Addressing
- Typical IP network problems
- 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 timer
- TCP graphs
- UDP functions

#### Analysis of TCP/IP with Wireshark

- · Wireshark settings for advanced TCP/IP analysis
- Typical problems with TCP/IP
- · Wireshark Expert info messages and their meaning

#### **TCP/IP** applications

- HTTP
- FTP
- DNS
- TLS

# About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers gualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.



VMware

#### Germany

Fast Lane Institute for Knowledge **Transfer GmbH** Tel. +49 40 25334610

info@flane.de / www.flane.de

## Austria

**ITLS GmbH** (Partner of Fast Lane) Tel. +43 1 6000 8800

info@itls.at / www.itls.at

#### Switzerland

Fast Lane Institute for Knowledge Transfer (Switzerland) AG Tel. +41 44 8325080

info@flane.ch / www.flane.ch



### Fast Lane Services

- ✓ High End Technology Training
- ✓ Business & Soft Skill Training
- ✓ Consulting Services
- ✓ Managed Training Services
- ✓ Digital Learning Solutions
- ✓ Content Development
- Remote Labs
- ✓ Talent Programs
- Event Management Services